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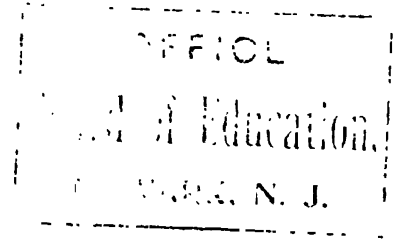
APPLETONS'
STANDARD
ELEMENTARY
Geography

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CHARLES HERBERT THURBER



APPLETONS'
AMERICAN STANDARD GEOGRAPHIES

BASED ON THE PRINCIPLES OF THE SCIENCE OF EDUCATION, AND GIVING SPECIAL PROMINENCE
TO THE INDUSTRIAL, COMMERCIAL, AND PRACTICAL FEATURES

ELEMENTARY GEOGRAPHY



"Our lessons should start from the concrete, and end in the abstract."

"Perceptive knowledge should be made the basis of primary instruction. Objects should precede names."

NEW YORK, BOSTON, AND CHICAGO
D. APPLETON AND COMPANY

1880

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FROM THE GIFT OF
CHARLES HERBERT THURBEN
Mar. 5, 1926
P R E F A C E .

FROM the title-page of this book may be gathered an idea of its design, scope, and method. Prepared in accordance with the views of advanced teachers, it is believed to embody the most natural and philosophical system. It treats the subject objectively, makes knowledge precede definitions, and presents facts in their logical connections, taking gradual steps from the known to the unknown. It is offered to the public in the hope that it will lay a substantial foundation for the subjective development of this branch of study in the HIGHER book.

In this volume the aim has been, not to teach *much*, but to teach what beginners can understand and digest. It has been sought to lay no unnecessary burden on the young learner; to sift out the useful from the unimportant; and so to link geographical facts with striking facts of history, of natural history, and of social life, that they may be permanently impressed on the mind. Special attention is asked to the *system of reviews*, to the *written exercises* interspersed, to the *paragraphs in heavy-faced type* summing up from time to time what is most necessary to be remembered, and to the *occasional references* introduced for the encouragement of more extended reading on interesting points.

The Introductory Course is designed to make subsequent instruction intelligible, by giving the young pupil definite ideas of position, direction, and distance; of the natural divisions of land and water, and the manner of representing them on maps; of climate; of the vegetable, the animal, and the mineral kingdom; and of the occupations and conditions of men. No formal definitions are given, but the new and necessary

ideas are imparted in reading-lessons, or are drawn out orally by questions leading up from things already familiar. Illustrations are furnished on which to base such questions, and model oral exercises are presented, which may be extended by the teacher as time and circumstances allow. The pupil is led out from the scenes of his every-day experience; and his circle of knowledge is gradually widened till it embraces country after country, and finally includes the entire world. It is believed that, even with a partial preparatory course like that here offered, the pupil will be able to cope with the difficulties of the subject far more intelligently and successfully than by commencing in the old-fashioned way with the earth as a whole and with abstract definitions.

The beginner is taught in this book to appreciate distance, to apply the scale of the map, and to draw simple outlines by the use of the scale and by imitation. The maps of a first book in Geography should be distinct, unencumbered with names, accurate, and attractive. Such we have tried to make the maps in this volume; as regards the questions on them, we have sought to present a sufficient number to familiarize the pupil with their contents, without overloading his memory.

The authors trust that this little volume will be found *elementary*, not merely in name and size, but also in the style and quality of its matter, and above all in its development of the subject; that the distinctive features of arrangement and treatment may help to a more easily-acquired, thorough, and lasting acquaintance with the elements of Geography than has heretofore been generally attained by Primary classes.

LIST OF MAPS.

	PAGE		PAGE
UNITED STATES, ...	22, 23	CENTRAL AMERICAN STATES, ...	61
NEW ENGLAND STATES, ...	27	SOUTH AMERICA, ...	65
MIDDLE ATLANTIC STATES, ...	33	EUROPE, ...	70
SOUTHERN STATES, ...	36	BRITISH ISLES, ...	77
CENTRAL AND NORTH CENTRAL STATES, ...	40	AFRICA, ...	81
PACIFIC AND ROCKY MOUNTAIN STATES AND TERRITORIES, ...	47	ASIA, ...	86
NORTH AMERICA, ...	53	OCEANIA, ...	93
DOMINION OF CANADA, ...	57	WESTERN HEMISPHERE, ...	96
		EASTERN HEMISPHERE, ...	97

In the pronunciation given with proper names, sound *æ* like *a* in *sofa*; *ʌ* like *a* in *bat*; *eh* like *e* in *get*; *i* like *i* in *pin*; *o* like *o* in *for*; *oo* like *oo* in *wool*; *ow*, like *ow* in *cow*; *gh* like *g* in *get*.

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Nov 1880

ELEMENTARY GEOGRAPHY.

INTRODUCTORY COURSE.

I. DIRECTION.

For the pupil to read.

THE time has come when we are to learn something about the world. We are going to visit new places, where we shall find many things to interest us. We start from the school-room.

The school-room has different parts. The *ceiling* is overhead. The *floor* is beneath our feet. A *wall* is on each side of us. Before us is one *end* of the room, behind us is the other end.

Which way is each of these parts from us? The ceiling is *up*, the floor is *down*. A bird flies — from the ground; a man falls — from a ladder.

We call one of our hands the *right* hand, and the other the *left*. The wall which is on the same side as our right hand is on our *right*. The wall on the same side as our left hand is on our —.

As we sit or stand, we face in a certain way. The end of the room that we face is in *front* of us, the opposite end is *back* of us.

To go home from school, we must know *which* way to go. To *direct* a person to a certain place, we must tell him the **Direction** he must take; that is, which way he must go.

Up and down, right and left, front and back, imply certain *directions*. There are other names of directions that are used to denote which way one thing is from another.

MODEL FOR ORAL EXERCISES.

The following will serve the teacher as a model for exercises on direction :—

Point up—down—to the right—to the left—in front of you—back of you. What part of the school-room is on the right? *The right side*. What part of the school-room is on the left? If you face in the opposite direction, will the same part of the room be the right side?

Point to where the sun rises. What part of the school-room is in that direction? *The right side, left side, front of the room, or back of the room*, as the case may be. What name is given to that direction?

Point to where the sun sets. What part of the school-room is in that direction? What name is given to that direction?

Let the class stand, and point to the east with their right hands, to the west with their left. What direction is in front? What direction is behind?

Name the four directions you have just found.

Point in the direction between north and east; what shall we call this direction? *Northeast*. Between east and south; what name shall we give to this? Between south and west; what direction is this? Between west and north; what is this called?

How many directions have we named in all?

Name them in order, beginning with the north and going east. Name them, beginning with the north and going west.

Face in the direction opposite to northwest, and name this direction. Face opposite to northeast. Opposite to south.

In what direction does the right wall extend? The left wall? The back of the room? The front of the room?

In what direction does your shadow fall when the sun is rising? When the sun is setting? In what direction does it

fall exactly at noon? At noon, how can one find which way east is? At sunset, how can one find which way north is?

In what direction is the teacher's desk from your desk? Your desk from the teacher's desk? In what direction are you from me? In what direction am I from you? Where would you have to stand, to be north of me? To be south of me? If you moved farther off, in the same direction, would you still be south of me? *

To be learned.

There are four principal directions; North, East, South, and West. Northeast is midway between north and east. Southeast is midway between south and east. Southwest is midway between south and west. Northwest is midway between north and west.

To be completed, and written or read.

The sun rises in the —, and sets in the —. If I face the east, my right hand is toward the —, my left hand is toward the —. If I face the west, my — hand is toward the north, and my — is toward the south. If I face the north, the east is on my — side, the west is on my — side. If I face the south, the — is on my left side, the — is on my right.

II. DISTANCE AND MEASURING.

For the pupil to read.

To find a place, we must know something more than in what direction it is from us. We may know that it is on our right or on our left, that it is north or south of us; but, to locate it, we must also know *how far off* it is. We must know its **Distance**, as well as its direction.

In order to find how far off a thing is, we

* **NOTE.**—Exercises like these should be repeated daily, the pupil pointing to different objects and parts of the room, naming the direction of one from another and of each from himself—then changing his position, and naming his new direction from each. The drill should be extended to objects out of doors, till all are perfectly familiar with the eight points designated, and can tell directions promptly and accurately.

This accomplished, the matter in heavy-faced type should be committed to memory. *Let paragraphs in this type throughout the book be memorized, and kept in mind by frequent reviews.*

Then follows an exercise which tests the pupil's comprehension of what he has learned, by requiring him to complete sentences from which words are omitted. If written, such exercises, besides impressing on the mind the facts they embody, become valuable helps in teaching language, spelling, punctuation, and penmanship. It is recommended that they be written, and they are hereafter headed **WRITTEN EXERCISES**. If, however, circumstances require, the sentences as completed may be read.

have certain **Measures**, as they are called. Here is one of the smallest measures.

We must look at it carefully, and remember exactly how long it is. We must cut a piece of paper or of wood just as long as this measure. We must try to draw lines of the same length as the measure, till we can do it exactly. Then we shall know how much an *Inch* is, for this measure is an inch.

Next we must put two inches together.

and try to draw a line of this length; and so with three, four, five, and six inches.

If we cut a strip of paper six inches in length, we shall find that it is just as long as the reading-matter on this page is wide. If we put two such strips together, we have a new measure, twelve inches long, called a *Foot*. It will be well to keep an inch and a foot measure at hand.

An inch and a foot measure are used, not only to determine how far one thing is from another, but also to find how long a thing is, or how wide, or how high.*

MODEL FOR ORAL EXERCISES.

(The teacher draws a line on the blackboard.) Is this line greater or less than an inch? Let each pupil try to draw a line an inch long. Here are some strips of paper; let each try to tear from one of the strips a piece an inch long. Compare the piece with your inch measure, and if you are wrong try again.

* **NOTE.**—In like manner, by putting three feet together, the idea of a *yard* may be developed; and by putting five and a half yards together, the idea of a *rod*. The name of each may be given as soon as a correct idea of its length has been formed.

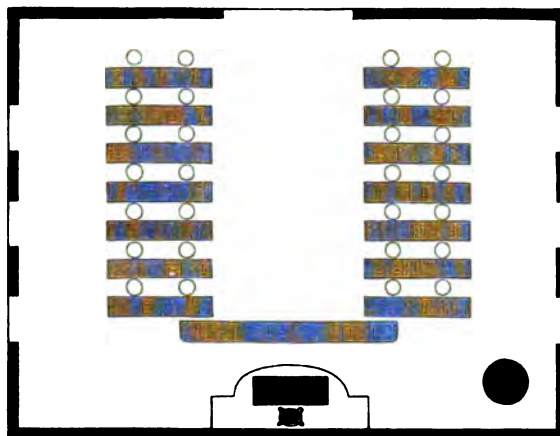
The class should then be supplied with a yard and a rod measure. A stout cord 16½ feet long, with a knot at every foot, and a double knot at every yard, is all that is necessary.

The pupil should next be taught to measure the school-room and objects in it, as well as distances out-of-doors, until he becomes familiar with the relative length of the measures employed. He should also be called on to estimate the length, width, and height of different objects, and their distance apart, in inches, feet, or yards; and then to test his estimate by applying the measure.

The idea of a mile and its fractional parts is best conveyed by reference to prominent objects distant from the school about a mile, half a mile, a quarter of a mile, etc.



PICTURE OF SCHOOL-ROOM.



MAP OF SCHOOL-ROOM.

Try to draw a line two inches long; three inches; six inches; nine inches; twelve inches. What do twelve inches make? Compare with a foot measure the line last drawn, and see how nearly you are right. From a strip of paper tear off a piece a foot long. Draw a line two feet long. How many inches in it? What do three feet make?

Draw a line a yard long. How many inches in it? Divide it into two equal parts; what is each part called?

Draw a line a yard long. Divide it into four equal parts; what is each part called? How many inches in a quarter of a yard? How many feet in a yard?

Locate points an inch, a foot, and a yard respectively, from this point which I have placed on the board. How far is it from the floor to the bottom of this window? To the top of the window? To the top of the door?

Draw a line two yards long; three yards. What is a measure five and a half yards long called? A *Rod*. How many feet in a rod? Find the length of your school-room in feet; in yards. Measure its width.

Imagine 320 lines, each a rod long, put together; they would make the measure called a *Mile*. What street or house is about a mile from your home? About half a mile? About a quarter of a mile? How long does it take you to walk a mile? How long does it take a train of cars to go a mile?

Twelve inches make one foot. Three feet make one yard. Five and a half yards make one rod. Inches, feet, yards, and rods, are measures of length and distance.

WRITTEN EXERCISE.—*Complete the following:* We can fix the position of a place, if we know its — and —. There are four principal points denoting direction; namely, —. The four midway points are —. Distance is found by measuring. The smallest measure in common use is the —. Other measures are the —, —, —, and —. For long distances, the measure used is the —. The direction of the nearest church from my school is —; its distance is about —.

III. USING A SCALE.

For the pupil to read (*filling up the blanks, and doing the work indicated*).

I have measured the school-room, and find it to be — feet long. If I should try to draw on the blackboard a straight line of this length, to represent one side of the school-room, I should find the board too short to hold it. But I can make an inch on the board stand for a foot of length, and I will draw a line — inches long for the side of the room.

By measuring the school-room, I find it to be — feet wide. Allowing, as before, one inch for a foot, I will represent one end of the room by a line — inches long, joining the line that stands for the side. Next I will draw the other side, and then the remaining end.

I have now represented the school-room on what is called a **Scale** of an inch to a foot. On the slate I should draw it on a smaller scale—half an inch, or a quarter of an inch, to a foot.

As we have measured the school-room and made a map of it, so we may also measure the school-grounds and make a map of them.

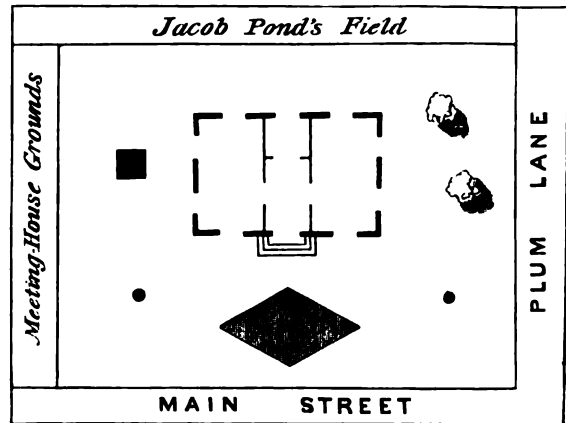
MODEL FOR ORAL EXERCISES.

Open your books at p. 5. What does the picture on the left represent? How many windows are in this school-room? How many desks? How many blackboards? How does this school-room differ from yours?

What does the engraving on the right represent? Point to the floor; the desks; the teacher's desk. How many win-



PICTURE OF SCHOOL-GROUNDS.



MAP OF SCHOOL-GROUNDS.

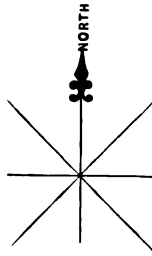
dows are in this room? How many desks? Does this represent the same school-room that is shown in the picture? What is a drawing like this called? *A Map*. What is the difference between a map and a picture?

Having measured the length and width of your school-room, of its windows, door, desks, etc., draw a map of the whole, on the scale of an inch to a foot.

How many inches long is your map? How many wide? How many windows does your map show? How many desks? In what direction is the door from the center of the room? Point out on the map the seat you occupy.*

The teacher places the diagram on the blackboard, and calls on one of the class to write at the end of each line the name of the direction in which it points.

In what direction does your school-house face? Toward what direction is its rear? How many windows open on the east side? On the west? What part of the grounds is toward the north? Toward the south? Toward the east? Toward the west?



The School-Grounds.—Open your books at p. 6. What are shown in the picture? What objects do you see in these school-grounds? Suppose the school-house to face the south; in what direction from the school-house is the pump? The diamond-shaped plot? The left-hand tree? The right-hand tree? In what direction are the two bushes?

With your measure find how many yards long and wide your school-grounds are.

* NOTE.—To prevent erroneous notions with regard to direction, the first maps should always be drawn or suspended on the north wall of the room, so that the east and west of the map may be toward the east and west. When the idea that the top of the map is always north, and the right hand east, is fully established, this caution need not be observed.

Draw an outline of your school-grounds, on the scale of an inch to the yard. How many yards is your school-house from the north fence—from the south fence—from the east fence—from the west fence? Represent your school-house on the map just drawn.

What other objects are in your school-yard? Measure the distance of each from the nearest fence; locate it on the map.

By what are the school-grounds represented in the picture on p. 6 surrounded? Why is a fence put round them?

Where do the grounds end? What is north of them, on the map? What is east of them? South of them? West of them? We call these the **Boundaries** of the grounds.

When we tell what adjoins the grounds on each side in order, we **bound** the grounds. The school-grounds in this map are **bounded** north by Jacob Pond's field, east by Plum Lane, south by Main Street, and west by the Meeting-House grounds.

Bound the lot on which your school stands.

Bound the lot or farm on which your house stands.*

IV. NATURAL DIVISIONS.

For the pupil to read.

In going home from school, we follow streets or roads running through the *land*. But on our way, or if we continue our course, we may come to some stream or pond. This is *water*. Land and water make up the surface around us.

* NOTE.—The school-district is next to be considered. A wider range is now given to the exercises on direction, distance, and boundaries. The pupils may be questioned on the directions in which they live from each other; the directions in which the principal streets or roads run; the distance between well-known points; the boundaries of the school-district, etc.

In some parts of the country, boys have great sport in coasting; that is, in riding on sleds down a hill covered with snow or ice. They go very fast. When we ride up-hill in a wagon, we have to go slowly. I know what a *hill* is. It is made up of —, and is raised higher than the surface around.

When we have gone all the way up a hill, we have reached the *top*. When we have gone all the way down, we have reached the *bottom*. Between the top and the bottom are the *sides*, or *slopes*.

A hill is a division of land. It is not made by man, but by *nature*. We call it a **Natural Division**. There are other natural divisions, about which we must learn.

MODEL FOR ORAL EXERCISES.

If an elevation of land is so high that you would have to travel several hours to reach the top, what is it called? *A Mountain*. Which is higher, a Mountain or a hill?

Have you ever seen a *chain*? Of what is it made up? When mountains are joined together, like links in a chain, and extend in one direction perhaps for many miles, what do they form? Have you ever seen a Chain, or Range, of mountains?

Turn to the map on p. 53; point out the mountain-ranges. Turn to pages 62 and 72, and you will see how mountains look in pictures. Point out the mountains in these pictures.

Do you prefer riding on level land or up and down hills? What is a tract of level land called? *A Plain*. What is level land between hills or mountains called? *A Valley*.

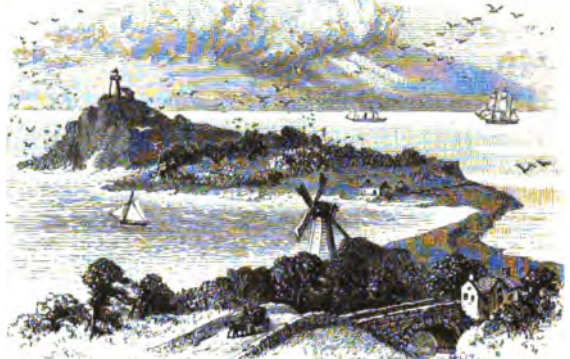
How does a meadow look? Suppose a meadow, covered with grass and wild flowers, to extend in every direction farther than you can see; it would be called a *Prairie*. Now imagine a large tract covered with deep sand instead of grass; would anything grow in it? What name is applied to a dry, barren plain? Would you like to travel through a *Desert*?

Open your books at p. 7; look at the picture in the left-hand column. What do you see in the background? What



PICTURE OF AN ISLAND.

is in front of the hills? What do you see in the middle of the water? What is a portion of land thus surrounded by water called? What are growing on this *Island*? Have you ever seen an island? Where? Now turn to the map on p. 53, and find Iceland. What is Iceland? How do you know Iceland is an island? Point to other islands on this map.



PICTURE OF A PENINSULA, AN ISTHMUS, AND A CAPE.

Look at the picture in the right-hand column of p. 7. Is that long piece of land an island? Why not? This piece of land, which is almost an island, we call a *Peninsula*. We call the neck that connects it with the mainland an *Isthmus*. Point to the isthmus.

What objects do you see on the peninsula? The strip of land bordering the water is called the *Shore*. What stands on the shore of the peninsula? The point at the end of the peninsula is called a *Cape*. Into what does the Cape project? Turn to the map, p. 53. Find all the peninsulas on the map; in what direction does each project? Find the isthmuses.*

* NOTE.—The natural divisions of water may be treated in a similar way. With a stream near by, it will be easy to develop ideas represented by the terms *current*, *up* and *down*—*banks*, *right* and *left*—*branch*, *source*, *bed*, and *mouth*. The way in which streams are formed from *springs*, and the reason why they take the courses that they do, may be explained, and the names *Brook*, *Creek*, and *River* applied.

Observation of the relations of the land to the water along the stream will assist in forming ideas of a *Bay*, a *Gulf*, a *Strait*, and a *Channel*.

A neighboring pond will serve as a basis for conveying the notion of a *Lake*; in connection with which, the meaning of the words *inlet* and *outlet* may be made clear.—In every case illustrate with pictures (see p. 8), and refer to a map, as before.

A most interesting means of illustration may be easily provided, by procuring some molding-sand, and a large pan, or flat piece of wood with raised border. The pupils may then be called on to mold hills, mountains, mountain-chains, valleys, plains—to form islands, peninsulas, isthmuses, capes—to show lakes, bays, straits, rivers, etc. In like manner, the school-district or the township, with its reliefs and natural divisions, may be represented.



PICTURE OF A RIVER, A LAKE, AND A BAY.

Hills, mountains, plains, islands, peninsulas, isthmuses, and capes, are natural divisions of land. Rivers, bays, gulfs, straits, channels, and lakes, are natural divisions of water.

Questions on the Engraving above.—Do you see houses in the picture? On the border of what do they stand? Is the water in the middle of the picture entirely surrounded by land? What is such a body of water called? What flows into this lake? In what part of the picture do you see a branch of the lake indenting the land? What is such a branch called? Where is a waterfall represented?

Signs used on Maps.—To denote different objects on local maps, various signs are used, which the pupil must understand. Let him now learn them from the accompanying map, and practice making them till he can reproduce them at the word and give their meaning at sight.

Each pupil may then draw a map of the route he takes to school, denoting his own dwelling and other objects, the roads or streets, etc., by the proper signs as already learned. The different maps will probably cover most of the district.

V. THE TOWNSHIP.

The lessons on the Township should include,

1. Its boundaries.
2. The direction and distance of familiar points in the vicinity.
3. The hills, the mountains, streams, lakes, etc.

4. The villages. From a single dwelling lead up to the idea of a village.

5. The chief roads, railroads, and canals.

The whole may be embodied in a map drawn by the pupil. Needed information may be given orally by the teacher, and illustrated with local maps.

For City Schools, it will be necessary to substitute for the above, exercises on the surroundings of the city, its principal streets, the directions and distances of its public buildings, etc.

MODEL EXERCISE FOR CITY SCHOOLS.

What is the name of the city in which you live? What bounds it on the north—on the east—on the south—on the west? About how long is it? What is its width?

What river is it near? In what direction is this river from your school? About how far? In what direction does it flow?

What other streams are near? What other bodies of water? In what direction is each from the school-house? What kind of boats have you seen on these waters?

What is the principal street of your city? In what direction does it extend? How far is it from your school, and in what direction? Name two streets that have the same direction as this principal street. Name two streets that cross it. In what direction do they run?

In what part of the city is the City Hall? In what direction is it from your school-house, and about how far? Point toward it. On what street is the post-office? In what direction is it from your school? How far? Point toward it.

What churches stand farther north than your school-house? Farther south? What prominent building is east of your school-house? West of it?



MAP OF PART OF SCHOOL-DISTRICT.

Name any other prominent buildings. State the direction and distance of each from where you are, and point toward each. On what street is there a telegraph-office? Point toward it.

What parks are in the city? Which way and how far is each from your school? What bridge or bridges are in or near the city? Over what do they extend? Name the principal railroads, and tell in what direction each extends.

Draw, on some convenient scale, a map showing as nearly as you can the situation of your city, and the river or railroad (or both) on which it stands. Mark over with cross-lines the part covered by the city. Indicate the site of the City Hall, the post-office, and your school-house.

VI. CLIMATE.

For the pupil to read.

In summer the weather is for the most part hot, in winter cold. When it is neither very hot nor very cold, we say it is mild or moderate. *Hot*, *cold*, and *moderate*, denote different kinds of Temperature. A high temperature implies heat, a low temperature cold.

On a bright day, when the sun shines, the air is dry. When it rains, we say it is a wet day. Sometimes, just before it rains, the air feels very damp. *Wet* and *damp* denote different degrees of Moisture in the air.

Some kinds of weather make us feel strong and well; then we say the weather is *healthy*. At other times the changes are sudden and violent; various diseases prevail. Then we call the weather *unhealthy*.

The temperature, the moisture, and the healthiness, determine the character of the **Climate**.

The climates of different places differ. Places that are high up on a hill or mountain are cooler than places that are in a valley at the base of the hill or mountain. As a general rule, places that are farther north than we are, have a cooler climate than ours; but, for a warmer climate, we should have to go south.

Climates may be hot or cold, damp or dry, healthy or unhealthy. The climate of a given place is different at different seasons. The climates of different places differ in temperature, according as the places are higher or lower, farther north or farther south.

WRITTEN EXERCISE.—There are four seasons; namely, —. In spring the plants — forth from the earth. The spring

months are —, —, and —; the weather is then usually —. The summer months are —, —, and —; they are the — months of the year. After summer comes —. Autumn is sometimes called —, because then the — fall from many of the trees. Autumn weather is generally —. The winter months are —, —, and —; then we have the — weather.

For a colder climate, we should have to go to the —, or seek higher ground on some —. For a warmer climate, we should have to go —.

VII. VEGETATION.

For the pupil to read.

Spring is the time in which plants *spring* from the ground. Plants have roots, which drink in moisture from the soil. They have stems, through which the sap, or juice, of the plant circulates. They have leaves, which breathe in what is needed from the air. The roots, stems, and leaves, are called *organs*.

A plant is an *organ'ic* body, and has life. The plants of a country constitute its **Vegetation**.

Plants begin to grow in spring, because then the weather begins to be warm. There are regions so cold that few if any plants will grow in them.

In order that plants may grow, their roots or leaves must supply them with moisture. Where no rain falls, there are generally deserts.

Besides warmth and moisture, a good soil helps the growth of plants. The farmer knows this. He puts fertilizers on his fields, to make the soil rich.

Some plants do not shed their leaves in winter. They are ever green, and so we call them *evergreens*. The pine is an evergreen. Other trees lose all their leaves; they are called *de-cid'-u-ous*. The oak is a deciduous tree.

Some plants come up of themselves, and bear blossoms and fruit though no one takes care of them; these are *wild* plants. Others come up from seed that is planted, and are tended with care, kept free from weeds, etc. Such plants are said to be *cultivated*.

Plants are useful in various ways. Some, such as pines and other trees, yield wood for building and for fuel. Others, as cotton and flax, furnish materials for clothing. Others supply us with drinks, as tea and coffee; others, again, with food, as potatoes.

Consult Gray's "*Botany for Young People*," Part I., p. 85.

Plants are organic bodies, and have life. Warmth and moisture are necessary to plant-life. Plants that shed their leaves in winter are called deciduous; those that do not, are evergreens.

WRITTEN EXERCISE.—Complete the following: Trees and shrubs differ in size; — are the larger. I will write the names of all the evergreens I can think of: —. The deciduous trees are still more numerous; they include the —. As specimens of wild plants, the following may be mentioned: —. Some of the commonest cultivated plants are —.

Different parts of food-plants are used for food: for instance, the roots of the beet, the —, and the —; the tubers of the potato; the leaves of cabbage and —; the flowers of cauliflower; the stalks of asparagus and —; the fruit of the —, the —, the —, the —, etc.; the seeds of wheat, —, —, —, etc.

VIII. ANIMAL LIFE.*

For the pupil to read.

There is a class of bodies that have a higher kind of life than plants. They have feeling. They can move from place to place when they wish. We call them **Animals**. As specimens of animals, I can name —.

Animals have eyes with which they see, ears with which they hear, lungs with which they breathe, etc. Eyes, ears, and lungs, are organs. Animals, therefore, like plants, are *organic* bodies.

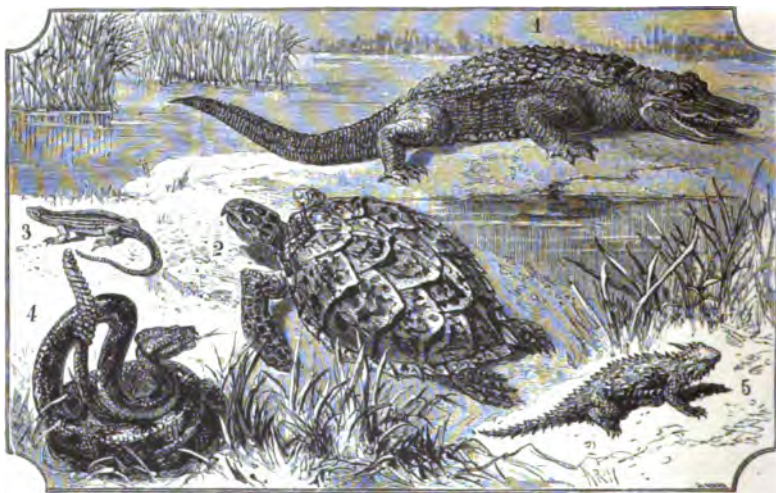
Some of the lower animals, as the cow and the horse, live with man and are under his control. These are known as *domestic* animals. Others live in an untamed state, and are called *wild* animals. The deer, the wolf, and the panther, are wild animals.

The cat and the dog are two of the commonest domestic animals. Both have claws and teeth

suitable for tearing flesh. We call such animals Car-niv'o-ra (*flesh-eaters*).

Other domestic animals do not eat flesh, but live on vegetable food. The cow and the horse are examples of these. They lack the sharp teeth of the carnivora, and instead of claws they have hoofs. We call them Un'gu-lates (*hoofed animals*).

Birds are another class of animals. Let us compare some bird (a goose, for example) with a dog. Their parts agree in number, but differ in form. The mouth of the goose is in the form of a bill. The goose has two ears, but they do not stand out from the head like the dog's ears. It has a neck, but this neck is much longer than the dog's. Its front limbs are wings, and not legs. Its body is covered with feathers, instead of hair.



REPTILES.

1. Alligator. 2. Hawk-bill Turtle. 3. Lizard. 4. Rattlesnake. 5. Horned Toad.

Consult Packard's "Zoölogy," p. 488.

Snakes belong to another class of animals. The snake has no legs, but it moves rapidly by bending its long, slender body. Snakes, lizards, turtles, etc., are called *Reptiles*.

Fish form another class of animals. The carnivora, ungulates, birds, reptiles, and fishes, all have a backbone, or ver'tebral column. Hence they are all included under the general name of VERTEBRATES.

* NOTE.—This section on animals may be made interesting by oral lessons, in which the facts should be drawn out as far as possible by the pupil's own observation. In every case the idea should be developed before the scientific name is applied. The class may finally be required to assign to the proper division different animals with which they are acquainted.

QUESTIONS ON THE ENGRAVING.

Open your books at p. 10. How many animals are shown in the engraving? Have all these animals backbones? What, then, are they called? To which division of vertebrates do they belong?

Describe the alligator as you see it in the engraving. With what is it covered? Does it look as if it could walk on land? Does it live on land or in water? Does the alligator eat flesh? What makes you think that it does?

Have you ever seen tortoise-shell combs or knife-handles? Figure 2 in the engraving shows the animal from which tortoise-shell is obtained. Why is this animal called the *hawk-bill* turtle? What has it on its back? Of what is its shell made up? Are its fore-limbs or hind-limbs the longer?

What is peculiar in the appearance of the lizard? How is the back marked? With what are the feet armed? Of what other reptile does the tail remind you?

What snake is shown in the engraving? How many rattles has this snake? Where are they? What protrudes from the mouth? What part of the snake is the largest round? Describe the horned toad.

For the pupil to read.

Flies, bees, spiders, grasshoppers, ants, etc., are insects. Insects have no backbone, but are made up of joints. They are called **AR-TIC-U-LATES** (*jointed animals*).

Snails, clams, oysters, and other animals having a soft fleshy body protected by a shell, form a new division, known as **MOLLUSKS**. See engraving below.

Animals shaped like a star or flower, and having their organs arranged round a center, are

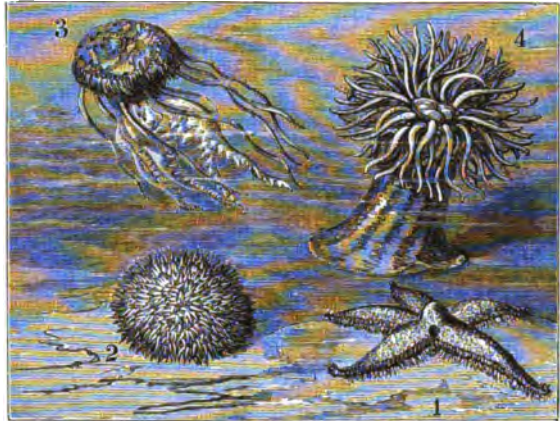


MOLLUSKS.

1. Oc'topus. 2. Cuttle fish. 3. Paper Nau'tilus.

grouped together under the name of **RA'DI-ATES**. See engraving below.

All animals are included in these four divisions: **Vertebrates, Articulates, Mollusks, and Radiates.**



RADIATES.

1. Star-fish. 2. Sea-urchin. 3. Medu'sa. 4. Sea-anem'one.

QUESTIONS ON THE ENGRAVINGS.

Look at the engraving of Mollusks, in the left-hand column of p. 11.

How many arms has the octopus? *Octo* means *eight*; *pus*, a *foot*—why is the octopus so called? What do you suppose it uses these arms for? Are its arms longer or shorter than its body? How many eyes has it? In warm regions the octopus grows very large, and is dangerous to men or cattle that come within reach of its long arms.

What shape is the body of the cuttle-fish? How many eyes has it? How many arms? From what part do the arms issue? How many long arms has it? At the end of these long arms are suckers, which attach themselves so strongly to an object that the limb will part before it will let go. This mollusk is provided with a bag from which, when attacked, it sends forth a black fluid, that it may escape through the darkened water. The ancients used this fluid for ink.

What does the paper nautilus look like? When it is floating on the water like a vessel, with what is the lower part covered? What represent the sails?

Turn to the radiates represented in the right-hand column of p. 11. Why is the star-fish so called? How many arms has the star-fish? If one of the arms of a star-fish is broken off, another will grow out in its place.

What is the shape of the sea-urchin? What does it look like? Describe the appearance of the medu'sa. What is the common name of the medusa? *The jelly-fish*. Why is this name given to it? What does the sea-anemone (*a-nem'o-ne*) look like?

IX. MINERALS.

For the pupil to read.

Plants and animals have life and grow. But a rock does not grow. A rock can not move of itself. If I strike a rock, it does not feel the blow. A rock has no life.

There is no life in a lump of coal, or in a piece of slate, or in sand, or in clay, or in iron. None of these have organs by means of which they can see, or breathe, or digest food. We call them *inorganic* bodies; and we group such inorganic bodies together under the name of **Minerals**.

Coins are made of gold, silver, and copper. Nails are made of iron. Shot is made of lead. Pins are coated with tin. Gold, silver, copper, iron, lead, and tin, all have a peculiar luster. They and other similar substances are classed together as **Metals**. All metals are minerals.

Of the metals just named, gold and silver are the most valuable. They are called the **Precious Metals**. Iron is the most useful metal.



Iron lies beneath the surface; to get it out, pits or *mines* are dug in the earth. The iron, as brought out from the mines, is usually combined or mixed with other matter, and is then called *ore*. Many other minerals are obtained from mines.

QUESTIONS ON THE ENGRAVING.

Turn to the picture on p. 12. What do you see in the side of the hill on the left? That dark opening is the entrance to an iron-mine. What do you see on the road leading from the mine? Describe the furnace at the bottom of the hill.

In this furnace the ore is to be *smelted* (melted); the iron is thus separated from the matter with which it was united. What is the stream that is issuing from an opening in the furnace? How has the iron been made liquid? The molten iron is received in sand-molds, consisting of long trenches with shorter cross-trenches leading from them. These are called the "sow and pigs," and iron thus cast is called "pig-iron." How many pigs do you see cast or partly cast in the picture?

Minerals differ from plants and animals in that they are inorganic bodies and have no life. They include the earths, rocks, metals, etc. The Precious Metals are gold and silver.

WRITTEN EXERCISE.—*Complete the following:* Different objects around us may be classified as vegetable, animal, or mineral. To the vegetable division belong —, —, and —. I belong to the division of —. I will write the names of all the minerals I can call to mind: —.

Iron is a —; it belongs to the division of —. Many useful articles are made of iron; for instance, —. Iron comes out of — in the form of —, which is smelted in —, with the aid of another — called coal.

Consult Pepper's "Playbook of Metals," p. 355.

NOTE.—The teacher may at this point devote several oral lessons to a consideration of the County. Supplementing the pupil's knowledge from a local map,

1. Draw an outline of the county on any convenient scale. The teacher may lead on the black-board, while the class follow on their slates.

2. Give the reliefs and drainage—the hills, mountains, streams, and lakes, inserting in the map each as it is named.

3. Bring out by questions what the pupil knows about the climate, productions, animals, and

minerals, supplying such information as he needs.

4. Locate the county-seat, cities, and villages.

5. Locate the railroads and canals.

6. Teach how to bound the county, inserting the names of the adjoining counties as they are mentioned.

Questions may now be asked on the map as to direction, distance, the ways of going from one place to another, etc.

X. OCCUPATIONS OF MEN.

For the pupil to read.

There are different ways of making a living—different *occupations*, as they are called.

Many till the soil; these are known as Farmers. It would not do to depend on wild plants for food. Grain must be cultivated, in order that we may have bread. So the farmer plows the ground and plants his seed. Then, after a while, when the crop has ripened, he harvests it.

Tilling the soil is called **Agriculture**.

Many farmers make hay, to feed to their live-stock in winter. Their live-stock consists of horses, mules, cattle, sheep, and hogs. Their cattle furnish beef for market, their sheep mutton, and their hogs pork. From cows they get milk, which may be made into butter or cheese.

That part of farming which has to do with milk, butter, and cheese, is called *Dairying*.

The farmer raises grain; but grain must be made into flour, and flour into bread. Here we have new occupations. Turning the raw material, like grain, into useful articles, like bread, is called **Manufacturing**.

One manufacturer saws logs into boards, and another makes the boards into furniture. One manufacturer extracts iron from the ore, and others make the iron into nails, stoves, screws, knife-blades, needles, and various other articles.

MODEL FOR ORAL EXERCISES.

Have you ever seen a man plow? How does he plow? Why does he plow? What have you seen growing in fields? Explain why grain grows in fields. How is planting done? What are apt to grow in a field, side by side with corn? How are weeds destroyed? Did you ever see a man hoe? How is it done? What is the implement used in hoeing called?

What are men that raise grain called? Why does the farmer cultivate the ground? When does he plant or sow the seed? What sometimes prevents the seed from coming up? How and when does the farmer make hay? How does he harvest his wheat-crop? His corn-crop? His potato-crop? Why do farmers raise horses? Sheep? Hogs? Cattle?

What is a person who makes shoes called? What materials does the shoemaker use? What does a wheelwright make? What materials does the wheelwright use? What other mechanics can you mention, besides the shoemaker and the wheelwright?



BLACKSMITH'S SHOP.

Open your books at p. 13. What is shown in the upper picture? Mention everything you see in the picture. What is the blacksmith near the horse doing? What material does he use in shoeing a horse? What is done to the iron, in order to shape it? How is the shoe fastened on?

Name some of the parts that make up a house. What materials are used in building a house? What is the mechanic called, that lays the stone or bricks? The mechanic that puts the roof on? The mechanic that puts in the wood-work? The mechanic that paints the house?

Of what are the doors of houses made? What mechanic uses wood? How does the carpenter fasten pieces of wood together? In what forms is wood, when carpenters use it? What is its natural form? How are trees made into logs? How are logs made into boards, planks, beams, etc.? What are boards, planks, beams, etc., called? *Lumber*.

What objects do you see in the lower picture on p. 13? Describe the parts of a grist-mill. What are manufactured in grist-mills? For what are flour and meal used? By what are mill-wheels turned? Did you ever see a wheel turned by water?

What machinery have you ever seen? What do we call things made by machinery and by hand? *Manufactures*. What are those who manufacture goods called? What materials do manufacturers use? *



GRIST-MILL.

* NOTE.—It will be well for teacher and pupils together to visit such mills, factories, or shops, as may be near at hand, and to observe the processes by which different things are made. The knowledge thus gained should be extended by means of oral explanations and descriptions found in books, till the pupils have clearly defined ideas of the ways of making-cotton, woolen, and linen goods, clothing, leather, paper, books, boots and shoes, houses, etc.

For the pupil to read.

The farmer raises more grain than he needs for himself. The manufacturer makes more wares than he can use. Now, if they can exchange products with each other—if the farmer can give some of his grain to the manufacturer, and receive manufactured articles in return—it will benefit both.

But a direct exchange would cost too much time and trouble. So there are men who make it a business to buy what others have to sell, and to keep for sale what others need to buy. These men are called *merchants*. Buying and selling, and the exchange of goods, constitute what is called **Commerce**.

Besides agriculture, manufactures, and commerce, there are various other occupations.

Men are engaged in obtaining coal and metallic ores from the earth, which is called *mining*; in getting out stone, which is called *quarrying*; in *fishing*; in pursuing and killing wild animals, or *hunting*; and in procuring timber from the forest, or *lumbering*.

There are, also, many clergymen, lawyers, physicians, editors, teachers, etc.

MODEL FOR ORAL EXERCISES.

What do the people about here raise or manufacture, to sell? To whom are these articles sold? How are they carried away?

What are the principal articles which the people about here buy? Of whom are these goods bought? Where do the merchants get them? How do the merchants get them here?

Mention all the ways in which goods are transported. The pupil will answer, by men and horses—on wagons, canal-boats, cars—on sailing-vessels and steamboats. The teacher may here add that in other countries goods are transported by elephants (p. 88), camels (p. 79), reindeer (p. 73), llamas (p. 66), dogs (p. 55), the yak (p. 85), etc.

What name is given to the exchange of goods? What are those engaged in commerce or trade called? The pupil

can readily be made to name traders, peddlers, and merchants; and to see that sailors, boatmen, teamsters, railroad men, etc., are indirectly engaged in trade.

How is trade made profitable?

Questions on the Engraving.—The engraving illustrates the three chief branches of industry. Which part illustrates agriculture? Which, manufactures? Which, commerce?

From what is most of our sugar obtained? *From sugar-cane, a stalk of which is seen running across the pictures.* Describe the stalk—the leaf—the flower.

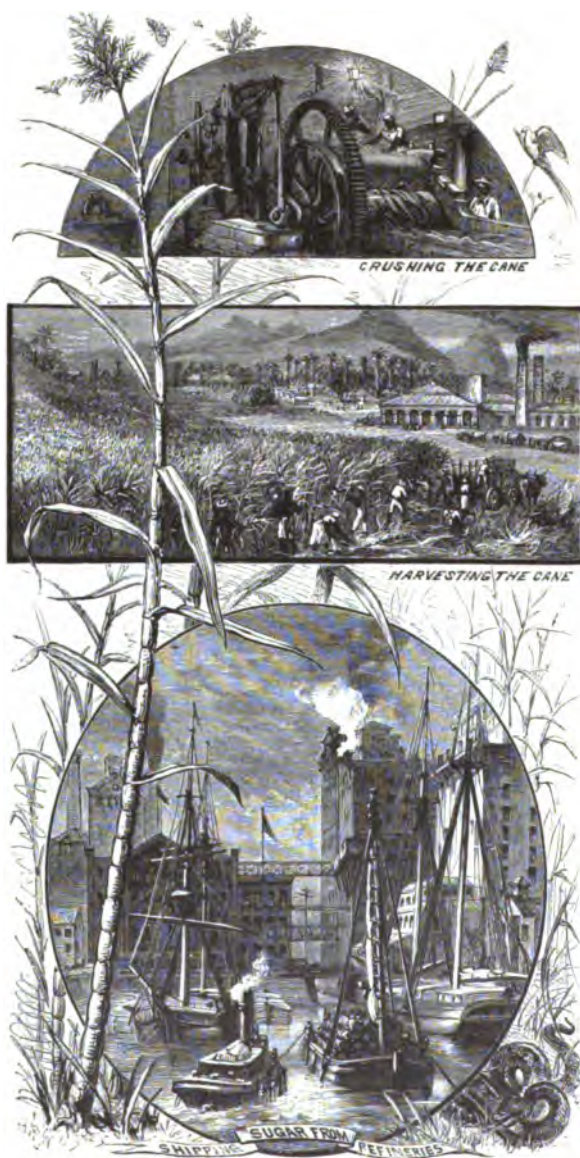
What does the middle picture show? How and by whom is the cane harvested? Compare the height of the cane with that of the harvesters. What is done with the cane after it is cut? Describe the sugar-mill, to which the carts are going.

What does the uppermost picture show? Why and how is the cane crushed?

What does the lower part of the engraving represent?

In what is the refined sugar packed? Do you see any barrels of sugar in the picture? Where?

Snakes are encouraged on sugar-plantations, because they feed on rats, which are destructive to the cane. Where do you see a snake in the picture?



Open your books at p. 15. Have you ever seen marble? What is the color of the marble you have seen? For what is marble used? Do you see any marble in the picture? Where? What are the men doing? What do they use in moving the blocks? How are the blocks transported?



A MARBLE-QUARRY.

What is the place from which marble is obtained, called? Is the quarry in the picture above ground or below ground? What stone besides marble have you seen used in building? What is a granite-quarry? A sandstone-quarry?

What is the color of coal? For what is coal used? Where do men obtain coal? What is the place from which they take the coal called? What are those who work in coal-mines called? What other mines are there?

Agriculture consists in tilling the soil. Manufacturing is making useful articles from raw materials. Commerce implies buying, selling, or exchanging goods. Other occupations are mining, quarrying, fishing, hunting, lumbering, etc.

XI. GOVERNMENT.—RELIGION.

For the pupil to read.

In every school there are rules which the pupils must obey. If the pupils are allowed to do as they choose, they may not learn much. There must be **Government** in school.

Some of the rules to be observed in school are made by the teacher; others are made by the School Board or School Officers. The teacher sees that the rules are obeyed. The governing power is in the teacher's hands.

So in a city or a village there must be government; there are laws which the people must obey.

Most cities are larger than villages, but it is not size that makes the difference between a city

and a village. A city is invested with certain rights which a village does not possess. A city is governed by a Mayor, as chief officer, and by a City Council, a Common Council, or a Board of Aldermen, by which body the laws are made. The mayor, and councilmen or aldermen, are elected by the people.

When a person is charged with a crime, he is tried in court. Every county has a *county-seat* or *shire-town*, in which courts are held. The county-seat contains the Court-House, in which the court meets, and the Jail, where criminals are confined. Many counties have a Poor-house, where poor people are cared for at the public expense.

There are few neighborhoods in which we can go very far without seeing a church, or building in which people meet to worship God. Some churches are Protestant, others are Catholic. Both Catholics and Protestants believe in Christ and the Bible. They profess the Christian **Religion**.

The Jews do not receive the whole Bible as the word of God; they acknowledge the Old Testament only. They reject Christ as the Messiah. Their religion is called the Jewish.

There are other religions in other lands.

MODEL FOR ORAL EXERCISES.

Why do children go to school? Why must there be order in school? Who enforces the rules in school? What is that part of the teacher's duty called? Why must there be *government* in school?

Who prevent disorder in a village or city? What do policemen and constables do with disorderly persons?

What is done with disorderly persons after they are arrested? Before whom are they tried? What name is given to the principal officer of the court? How are those who are found guilty of offences punished?

What is the chief officer of a city called? Do you live in a city? If so, who is mayor of the city? What other city officers can you mention?

If you live in a village, name its principal officers.

What town officers are there? What is the duty of the roadmaster? Of the assessor? Of the collector? Of the superintendent of schools?

What county officers can you mention? What is the business of the sheriff?

Who elect the chief county, town, village, and city officers? Who, then, really have the governing power? Have you ever seen an election? Describe one. Does everybody vote?



XII. CONDITIONS OF SOCIETY.

For the pupil to read.

People in different parts of the world are in very different conditions. All have not the same comforts that we enjoy. We have plenty of food and clothing, houses, railroads, steamboats, books, newspapers, and schools. We have a government that protects all in their rights.

People who have these advantages, who are kindly toward their neighbors, who follow regular occupations, and who try to advance and improve, are said to be *Civilized*.

There are others who are poorly clothed and fed, and have no regular occupations except hunting and fishing. They have no schools, and do not wish to learn. They are fierce and cruel, and take delight in war. These are called *Savage*.

Others, again, a little above the savages, rove from place to place, living on the products of their flocks and herds. They dwell in huts or tents, but have no books or schools, and only a few rude manufactures. These are called *Barbarous*.

A class of people higher than the barbarous till the soil in a rude way, and manufacture many articles by hand or simple machinery. They have some learning, and are not ignorant of the arts. These are called *Half-civilized*.

Questions on the Engraving.—Turn to p. 16. What do you see on the left of the engraving? Do rude nations build railroads, telegraphs, libraries, or school-houses? What do these things indicate? How is the condition of a people bettered by railroads? By telegraphs? By libraries? By schools? What do we call nations that have advantages like these? What other advantages have Civilized nations?

What do you see on the right of the engraving? Are these people civilized? What makes you think so? Are they as comfortable as civilized people? When men live miserably in caves or huts, supporting themselves on what they can find in the woods, what do we call their condition? Of what is the Savage condition the opposite? Do we find great cities among savage people? Why not? What things that you might see in a strange country, would make you think the inhabitants civilized—and what, savage?

What do you see in the two middle pictures of the engraving? Which shows the higher condition? Do you see in either any great marks of progress? What do we call these conditions? How do the Half-civilized and the Barbarous condition rank, as compared with the Civilized and the Savage?

Name the four conditions of society in order, beginning at the highest. In which condition will people be most likely to take care of the poor and sick, to make inventions and improvements, to become great and powerful? In which condition are people most likely to suffer from want of food? In which condition is your nation? Why do you think so?

By way of illustration, it may be stated that our nation belongs to the *civilized* class; but that even here there are men who will not work, and are always ready to commit violence, robbery, and murder: these may justly be ranked as *savages*. There are others, constantly moving from place to place, without employment and living by begging or stealing, who may be called *barbarous*. Others still, contented to live in a poor way and not desirous of improving, may be regarded as *half-civilized*.

According to their degree of civilization, different nations are classed as **Civilized, Half-civilized, Barbarous, or Savage.**

WRITTEN EXERCISE.—*Complete the following:* In civilized countries various occupations are followed. Men who cultivate the ground are called —; those who buy and sell are —; mechanics who build houses are known as —. Persons that make clothes are —; those who make shoes are —. Miners are persons who —, and quarrymen those who —. No such pursuits are carried on among — tribes. Savages get their living by —. — people are in a better condition than —. Between the savage and the civilized condition are the — and the —.

XIII. SHAPE OF THE EARTH.

For the pupil to read.

We live on the outside, or *surface*, of a great body called the **Earth**.

We have learned something about our own neighborhood. But that is only a small part of the earth's surface. It will be pleasant to visit other parts. We may go by steamers on the water, or by cars on the land. We must expect to find much that is strange.

One of the strangest things we shall learn, is that the earth on which we live is *round*, like a ball.



SHAPE OF THE EARTH.

Yet, when we look at the earth's surface, it seems to be flat and not round. This is because the earth is so large.

In a small ball like that shown in the preceding column, the roundness is readily seen. At the bottom of the page part of the surface of a larger ball is represented, in connection with a flat surface, or *plane*. The difference between them is very slight. The surface of a great ball like the earth differs still less from a plane. In the part that falls within our view, we can not detect any roundness.

What proof have we that the earth is round? One proof is that, if we start from any place and keep moving on in the same direction, we shall come back to the starting-point. We could not do this on any body that is not round.

If we started from a point on a plane, and kept traveling on in the same direction, we should get farther and farther from the starting-point.

The earth is round. Starting from a given point on the surface, and keeping on in the same direction, either east or west, we shall return to the starting-point.

XIV. THE STATE.

For the pupil to read.

Before going out to foreign countries, we should know exactly where we now are. The side of the earth on which we live is shown in the figure in the opposite column. The outline of a large body of land is there drawn, and a country called the **UNITED STATES** is marked off. That is our country. The teacher will show us the exact spot in which we are.

Towns and counties, are divisions made by man. They are not natural divisions, like mountains and islands.

The division next larger than a county is a **State**. A state makes its own laws, and provides for its own government. We live in the state of —; which, with a number of other states, is embraced in one large country, the United States.

Flat Surface or Plane.

PART OF THE SURFACE OF A LARGE BALL.

The chief officer of a state is called the Governor. The laws of each state are made by its Legislature. Both the governor and the members of the legislature are elected by the people.

The capital of a state is the *city* in which the laws are made. The *capitol* is the *building* in which the legislature meets to make the laws. The capital of our state is —.

NOTE.—The pupil should now copy the outline of the state in which he lives, from the sectional map on which it is represented. The teacher will decide what scale shall be used, and the length of the several boundaries may be ascertained by applying the scale of miles given on the map. Details may be filled in as they are learned. For capitals and for other towns, marks like those on the map may be used.

In considering the state, the following order of topics may be adopted. Many of the questions can be answered from the sectional map; the other information may be furnished by the teacher, with such degree of fullness as may be thought proper.

1. Outline, boundaries, and extent.

Has your state a regular or an irregular outline? Has it any coast-line, or is it inland? What natural divisions may form the boundaries of a state? When there is no such *natural* boundary, how are the boundaries made? When a boundary is made by man, or is *artificial*, what kind of a line is used to represent it? Are the boundaries of your state natural or artificial? What rivers, mountains, or lakes, form parts of the boundaries?

Bound your state. Find its greatest length, applying the scale of miles on the map. What is its greatest width? A square mile is a square a mile long and a mile wide. On the sectional map is a square which represents a certain number of square miles; about how many times is this square contained in the surface of your state, as represented on the map? About how many square miles, then, are in your state?

2. Mountains, plains, slopes.

What mountains does your state contain? Is it generally high or low? What part is highest? What part is lowest? As regards the levels drained, how does water flow? How can you tell the general slope of a country which contains rivers? What is the slope in different parts of the state?

3. Drainage: rivers and lakes.

What are the principal rivers of the state? Where does each rise? In what direction does each flow? Into what does each flow? Into what great body do the waters of each at last find their way? What lakes are in the state? In what part of the state is each lake situated? What inlets and outlets have they? Have all lakes inlets and outlets? How is a lake that has no inlets fed? If a lake has inlets and no outlet, what prevents it from overflowing its banks?

4. Soil and minerals.
5. Natural curiosities and places of resort.
6. Climate: winds, temperature, moisture, etc.
7. Vegetation: trees; staple products.
8. Animals, wild and domestic.
9. Railroads, canals, and routes of travel.
10. Occupations of the people.
11. Religion and social condition.
12. Schools, academies, and colleges.
13. State government.

Who is governor of the state? What is his business? *To execute the laws.* Does any one man make the laws? By whom are the laws made? Of how many bodies does the legislature consist? What are they called? Why are there *two* bodies to make the laws? What is the city in which the laws are made called? Whose business is it to decide what the laws mean? How do the judges get their office? By whom are the governor and legislators elected? What is a government called, which is vested in officers chosen by the people? *A Republican Government.* Under what kind of a government do you live?

14. Counties: let the pupil name his own county and any others that he remembers.

15. Cities: capital; largest city; seaports. How is each situated? If on a river, on which bank, right or left, going toward the mouth?

WRITTEN EXERCISE.—*Complete the following:* The state of —, in which I live, is bounded as follows: —. — County, in which my home is situated, is in the — part of the state. The village (town or city) of —, where I reside, is in the — part of the county. The state capital is —. The largest city of the state is —. The nearest river is the —. I live under a — government.

NOTE.—The pupil is now prepared for the lessons that follow, which he is to study and recite.

It will help the class always to read over in advance with the teacher the lesson that is next to be prepared. *When a state, town, mountain, river, or other division, is first mentioned in the text, let it be found on the map without any direction to that effect, and at recitation let its situation be stated.* Direct attention to the engravings, and ask questions on them.

See that the mode of representing the pronunciation of proper names is thoroughly understood.

Encourage recitation by topics, without minute questioning. Receive the substance, if given in correct language; the words of the book are not essential. For those who desire them, systematic questions on the text are given at the close of the volume. The matter in heavy-faced type at the end of the lessons, containing the most important facts, should always be committed to memory.

DESCRIPTION OF THE EARTH.

THE UNITED STATES

NOTE.

The present edition of this book was printed before the census of 1880 was taken ; and the statements herein made as to the population of the leading cities of the United States were based on what were then considered the most trustworthy estimates. The recent census shows Chicago to have a larger population than St. Louis, and the latter city to have less than half a million. The statements on pages 45 and 50 should be corrected accordingly.

The approximate figures, as at present announced, for the population of the ten largest cities of the United States, are as follows :

1. NEW YORK	1,207,215	6. BOSTON	363,565
2. PHILADELPHIA	843,000	7. BALTIMORE	330,000
3. BROOKLYN	554,696	8. CINCINNATI	255,804
4. CHICAGO	503,501	9. SAN FRANCISCO	233,066
5. ST. LOUIS	375,000	10. NEW ORLEANS	215,239

New York, July 15, 1880.



1. **The United States.**—We commence the study of the earth's surface with the United States, because that is our own country. The United States is composed of thirty-eight different states, all *united*, or joined together, under one government. It is often spoken of as **THE UNION**.

2. **Full Name.**—The figure on p. 17 shows the land on one side of the round earth. This land is called Amer'ica. The United States forms part of America, and the full name of our country is **THE UNITED STATES OF AMERICA**.

NOTE.—It will be well to show the class the situation of America on a globe, and to give them an idea of the size of the United States relatively to the whole land-surface on the globe.

3. **Map.**—Only a very small part of the United States can be shown in a picture ; but the whole can be represented in a map. A map of the United States is given on pages 22, 23, to which refer.

Map Questions.—Find your state on this map. Find the part of the state in which you live. Find the capital of your state. What mark denotes it? What kind of letters are used for its name? How can you tell a capital?

What is the color of your state? Are the states around it of the same color? Does the difference of color denote any difference in the character of the country? Is your state a large or a small part of the whole country?

What part of the map is north? East? South? West? Hold your book so that what is north on the map may be toward the north. In what direction is the upper right-hand corner from the center of the map? The upper left-hand corner? The lower left-hand corner? The lower right-hand corner?

What is on the north of your state? On the east? On the south? On the west? Give the boundaries of your state all together, pointing in each direction as you name it: — *is bounded on the north by —, on the east by —, on the south by —, on the west by —.*

The light-tinted country on the north is no part of the United States. It is called the Dominion of Can'ada; find it.

The light-tinted country on the south does not belong to the United States. It is called Mex'ico; find it.

4. **Size.**—The United States is very large. Boston is one of the great cities in the north-eastern part. San Francisco is the largest city in the far west. To go by railroad across the United States, from Boston to San Francisco, traveling day and night, takes a week.

If one could go by rail from the southernmost point of the United States directly north to Can'ada, it would take four days and nights.—In what direction is the United States longest?

Exercise with the Scale.—At the bottom of the map on the left is a Scale of Miles. Apply this scale from Cape Cod (east of Boston) on a westerly line across the country. How many times can it be applied? What, then, is the extreme length from east to west?

Apply this scale on a line running north from the southernmost point of the United States to Can'ada. How many times can it be applied? What, then, is the extreme width from north to south?

The United States contains 38 states.
Its greatest length is about 2800 miles.
Its greatest width is about 1600 miles.

LESSON II.

1. **The Great Lakes.**—On the north of the United States lie five large bodies of fresh water surrounded by land. They are called *Lakes*.

Name them from the map.

2. Each of these is larger than some of the states. Lake Superior is the largest lake in the world. We call these five lakes *the Great Lakes*.

Lake Michigan (*mish'e-gan*) lies wholly within the United States. Through the four other lakes a line is drawn, on the map. What does this line denote? What is the color of the Great Lakes on the map? What does blue on the maps represent? What other bodies of water are on the map?

3. **The Atlantic Ocean.**—On the eastern border of the United States lies a great body of salt water. What is it called on the map? A large body of salt water like this is called an *Ocean*.

There is land on the other side of the Atlantic Ocean, but it is so far off that steamers run east for nine days before they sight it.

4. The strip of land bordering the Atlantic is called the *Atlantic Coast*. The states bordering the Atlantic are called the *Atlantic States*.

Name some of them.

5. **The Pacific Ocean.**—On the western border of the United States lies another ocean; find it on the map. The first sailor from the Old World entered it after having met with violent storms. He found it *peaceful*, and so called it the *Pacific Ocean*. The Pacific Ocean is more than twice as wide as the Atlantic, and contains more islands.

6. The strip of land bordering the Pacific is called the *Pacific Coast*. The states bordering the Pacific are called the *Pacific States*.

7. **The Gulf of Mexico.**—On the southern border of the United States lies a great arm of the Atlantic Ocean, indenting the land; find it on the map. Such a body of water is called a *Gulf* or *Bay*. This arm of the Atlantic is called the Gulf of Mexico.

8. **The Territories.**—Besides the thirty-eight states, ten territories belong to the United States. Nine of them are shown on this map. The tenth, called Alas'ka, lies farther northwest, and is separated from the rest of the country. The territories are thinly settled. They have not the privi-

lege of electing their own governor. Nor can they, like the states, make their own laws independently of the General Government.

9. **The District of Columbia**, also, is included in the United States. It contains the capital of the United States, the city of Washington.

Map Questions.—A small map of the District is given at the lower left-hand corner of the map of the United States, p. 22. On what river is it? What state borders it on three sides? What state is on the opposite side of the Potomac?

The District here looks larger than some of the states on the main map, but that is because the scale is larger. Look along the Atlantic coast till you come to Maryland and Virginia. Find the city of Washington and the District there. Is the District really larger than any of the states?

In what part of the United States is the District of Columbia? Describe the situation of Washington. *Washington is on the left bank of the Potomac River* (the left as you go toward the mouth).

Why is it called the District of Columbia? What did Columbus do? When Columbus discovered America, he first landed at one of the islands near the lower right-hand corner of the map; what are those islands called?

The United States is composed of thirty-eight states, ten territories, and the District of Columbia.

The District of Columbia contains Washington, the capital of the United States.

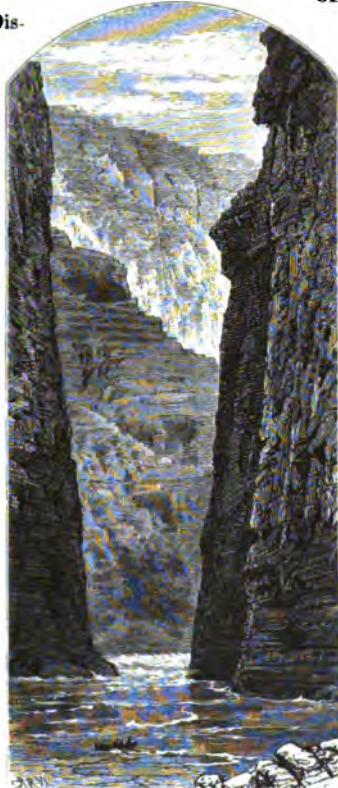
Find the three mountain-systems of the United States on the map. The three principal ranges of the Appalachian (*ap-pā-lay'ts-he-ān*) System are the Blue Ridge, the Alleghenies, and the Cumberland Mountains. Which of these ranges is farthest east? Which is farthest west?

3. **The Atlantic Slope.**—The eastern slope of the Appalachian Mountains, being toward the Atlantic, is called the *Atlantic Slope*.

4. **The Rocky Mountains** form the second of the great systems. They are continued northward into the Dominion of Canada, and southward into Mexico. They traverse Colorado (*kol-o-rah'do*)—which is called "the Rocky Mountain State"—and the territories that lie north and south of Colorado.

5. **Pike's Peak.**—The Rocky Mountains contain several peaks nearly three miles high. One of the most noted of these, Pike's Peak, you will find in the central part of Colorado. There is a horseback-trail to the top. It is a hard ride; yet people sometimes make the ascent for the sake of the grand view.

6. The sources of four great rivers can be seen from the top of Pike's Peak; name them. These rivers rise within a few miles of each other, but their mouths are many miles apart. Into what does the Platte (*plat*) River flow? The Arkansas? The Rio Grande (*re'o grahn'day*)? The Colorado?



GRAND CAÑON OF THE COLORADO.

The Rocky Mountains form an immense watershed. Into what gulf do the streams on the east at last find their way? To what ocean do the streams on the west flow?

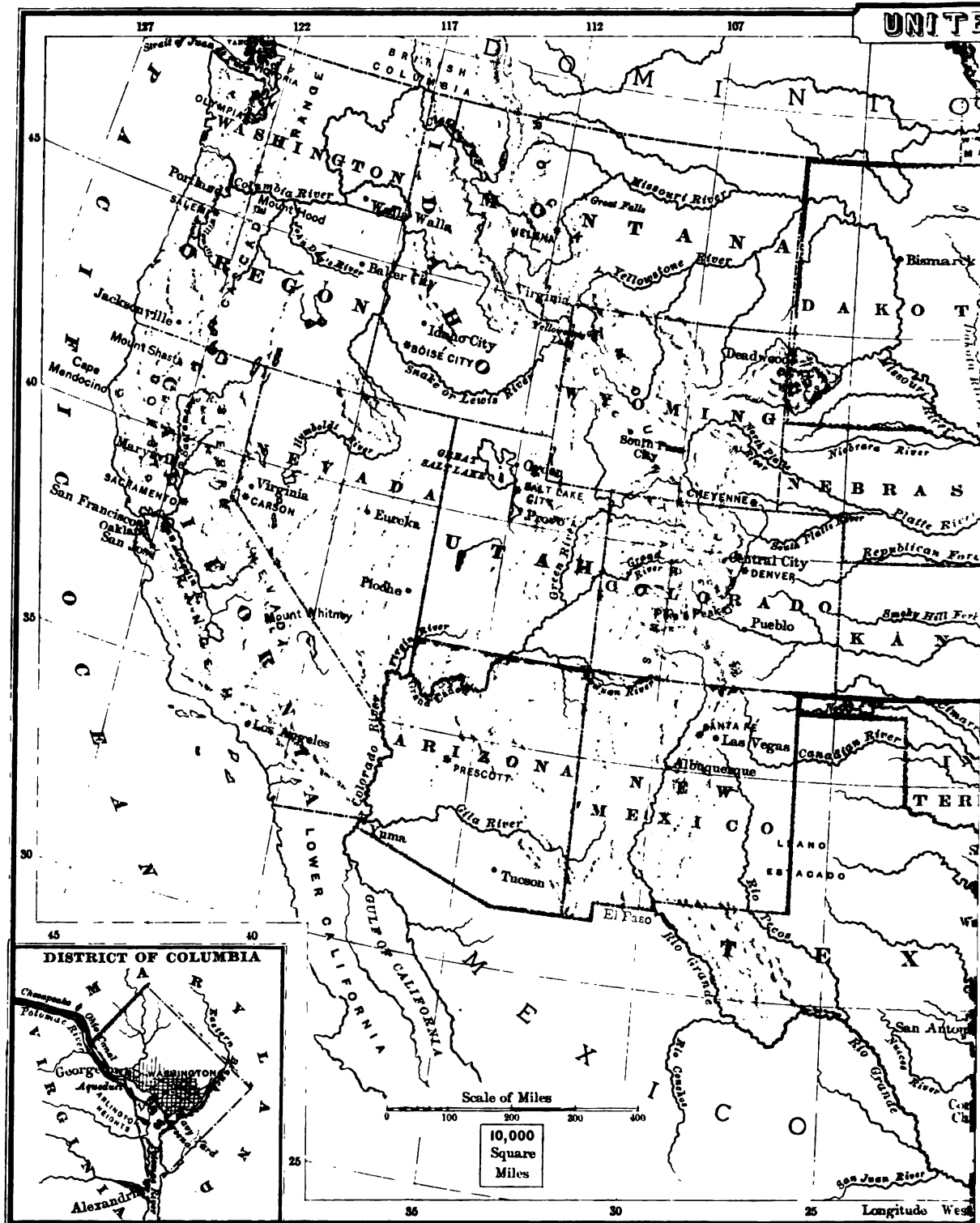
7. **Cañons** (*kan'yunz*) are gorges between steep banks, worn by rivers. They are common near the Rocky Mountains.

8. **The Grand Cañon.**—The Colorado River is famous for the Grand Cañon, in Arizona; find this on the map, and see engraving above. For two hundred miles the river rushes along through a deep, dark, narrow chasm, in some places faster than the fastest railroad-train. Huge walls of rock rise from the stream on either side, to a height of more than half a mile.

LESSON III.

1. **Mountains of the United States.**—Several adjacent mountain-ranges running in the same direction form what is called a *mountain-system*. Three great mountain-systems traverse the United States from north to south, or nearly so.

2. **The Appalachian System** is the most easterly. Its ranges have the same direction as the Atlantic coast. It separates the rivers flowing into the Atlantic from those that flow toward the west. Such a dividing ridge is called a *Watershed*.



[illegible]

LESSON IV.

1. **The Sierra Nevada** (*se-eh'r'rá nay-vah'dá*) is the most westerly of the great mountain-systems of the United States. It traverses California, and is continued northward in the Cascade Range. The Sierra Nevada has some peaks even higher than those of the Rocky Mountains.

2. The word *sierra* means a *saw*. It is applied to a range of mountains having numerous peaks standing up like the teeth of a saw. *Nevada* is the Spanish for *snowy*. The Spanish once owned California. Why did they call these mountains the Sierra Nevada?

3. **The Pacific Slope.**—The western slope of the Sierra Nevada, being toward the Pacific, is called the *Pacific Slope*.

4. **The Snow-Line.**—As we ascend a very high mountain, the air grows colder and colder. At last we reach a height where the snow remains unmelted all the year round. This is called the Snow-Line. The top of Mount Shasta, a peak of the Sierra Nevada, is above the snow-line. It can be seen, white and glittering in the sun, for a hundred miles.

5. **The plateau** (*broad high plain*), or table-land, from which the Rocky Mountains and the Sierra Nevada rise, is very elevated. Some of its towns are more than a mile above sea-level, and higher than the tops of the highest mountains in the Atlantic States.

The three great mountain-systems of the United States are the Appalachian Mountains, the Rocky Mountains, and the Sierra Nevada.

LESSON V.

1. **The Mississippi Valley.**—Between the Appalachian and the Rocky Mountains lies one of the most fertile tracts in the world. A tract thus inclosed between mountain-ranges is called a *Valley*. This valley, drained by the Mississippi, is known as the Mississippi Valley. Show where it lies on the map of the United States.

2. **The Mississippi River** rises in a little lake in the north of Minneso'ta. Follow the river up till you find this lake; what is it called?

3. **Its Deposits.**—The waters of the upper Mississippi are clear; but those of the Missouri and other branches bring with them a great deal of mud. This is carried down, and deposited near the mouths of the main stream. You see on the map how the land projects there into the Gulf of Mexico. It has been gradually formed of deposits from the waters of this great river.

4. We get the word *Mississippi* from the Indian name for the stream, meaning "Great River".

Going down from the source of the Mississippi, name from the map the branches you find emptying into it on the east. Mention those on the west. Which is the longest of all the branches? Which is the longest eastern branch?

5. **The Missouri River** is muddy, as its name signifies. It is much longer than that part of the Mississippi which is above its mouth. If we regard the part of the Mississippi below where the two rivers meet as belonging to the Missouri, we have a river more than 4,000 miles long—the longest in the world.

The Missouri, like the Mississippi, has many large branches. Name some of them.

6. **Commerce of the United States.**—The Mississippi and its branches form a network of rivers, spreading over the very heart of the country. There are many rivers, too, on the Atlantic coast, and many which flow into the Gulf of Mexico. Most of these rivers have steamboats on them, which carry produce and goods. They are the seat of an active commerce.

7. The Great Lakes are no less busy highways of trade; while from the various harbors on the coast vessels are constantly sailing, to carry the products of the United States to foreign lands and bring back theirs in return. Commerce, also, is greatly promoted by railroads. These iron roads thread the states in all directions, and connect the Atlantic with the Pacific.

To describe a River.—Describe the Mississippi River. *The Mississippi rises in Itasca Lake in the northern part of the United States, takes a southerly course, and flows into the Gulf of Mexico. Describe all rivers thus, naming the lakes or mountains in which they rise, or the rivers that form them.*

Describe the Missouri River.

The two largest rivers of the United States are the Mississippi and the Missouri. The Mississippi Valley is one of the most fertile valleys in the world.

LESSON VI.

1. **Agriculture.**—The United States is a great farming country.

2. **Products of Different Sections.**—In the most northerly sections the climate is cool, the winters are long, and grass is the most valuable product. The farmers raise potatoes and oats, rear cattle and sheep, and sell butter, cheese, and wool.

3. A little farther south the climate is warmer, and we have the great wheat region, extending to about the line marked 40 in the margin of the map. Just below this line, the heat still increasing, Indian corn, or maize, and tobacco, are the chief products, though wheat also receives attention. Throughout the corn region, hogs are raised in large numbers.

4. Find the line marked 35 in the margin. From a little north of this line to the Gulf of Mexico, the summers are long and hot; the winters are short, and snow seldom falls except on the hills. Cotton is here the staple production. Corn also is raised, and wheat in the highlands. Rice and sugar are produced in certain sections.

5. **Fruits.**—In the extreme north, apples and berries are the principal fruits. As we go south, cherries, pears, plums, and peaches appear, and in the far south we have oranges, lemons, figs, bananas, and pineapples.

6. **Manufactures** afford employment to great numbers. Clothing, boots and shoes, carriages, hardware, paper, and many other things, are manufactured. For this, *machinery* is used.

Sometimes the machinery is moved by steam. In other cases, the factories are built on streams having a considerable descent. The water is made to turn a wheel connected with the machinery, which is then said to be moved by *water-power*.

7. **Mining.**—The United States has great mineral wealth. It contains vast coal-beds, iron-mines, lead, copper, and in various parts of the mountains the precious metals, gold and silver. Many are employed in getting these treasures out of the earth.

8. **Government.**—The highest officer in the United States is the *President*. He is elected every four years by electors chosen in each state by the people. He lives at Washington, the capital, in a fine building called “the White House”.

Next to the President is the *Vice-President*, who is chosen by the same electors.

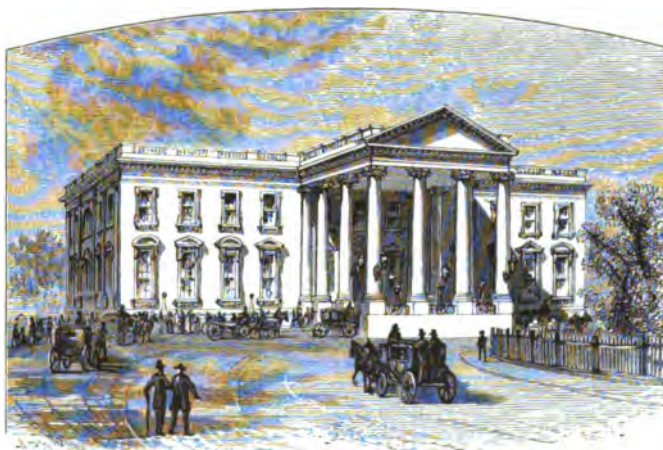
9. The laws are made by *Congress*. Congress consists of two bodies, the Senate and the House of Representatives. The Senators are chosen by the different states, two from each state. The Representatives are chosen by the people. Congress meets every year in the Capitol at Washington (*p. 19*).

10. **History.**—

The United States is little more than a hundred years

old. At first it was settled only along the Atlantic coast. Thirteen colonies, belonging to England, were formed there. Difficulties arose with the mother-country. The colonies declared their independence in 1776, and maintained it, under the great and good Washington, in the Revolutionary War. A free government was established. Thousands from foreign lands crossed the ocean to the United States. Large tracts in the West and South were bought and settled. New territories were formed, and new states were from time to time admitted into the Union.

The United States contains more than $3\frac{1}{2}$ millions of square miles, and 50 millions of inhabitants. The highest officer is the President.



THE WHITE HOUSE, WASHINGTON.

THE NEW ENGLAND STATES.

LESSON VII.

We have taken a general view of the United States. We shall now visit its different sections.

New England.—Look at the map of the United States on page 23, the extreme northeastern part. You will find there six states called Maine, New Hampshire (*hamp'sheer*), Vermont, Massachu'setts, Rhode Island, Connecticut (*kon-net'e-kut*). These are known as the NEW ENGLAND STATES, or New England. In what direction is New England from the Mississippi River? From the Gulf of Mexico?

On the opposite page is a map of the New England States by themselves, on a larger scale.

QUESTIONS ON THE OPPOSITE MAP.

(Let the states, rivers, mountains, etc., as they are named, always be pointed out by the pupils on a wall-map, if there is one.)

Do you live in one of the New England States? If not, point toward New England. How would you go there?

Which of the New England States is farthest east? Which extends farthest north? Farthest south? Farthest west? Which is the largest? Which is the smallest? Which two are the most mountainous?

In what direction is New Hampshire from Vermont? Connecticut from Rhode Island? Massachusetts from Connecticut? Maine from Massachusetts?

Bound Maine. (Look on the map.) *Maine is bounded on the north and east by the Dominion of Canada, on the south by the Atlantic Ocean, and on the west by New Hampshire and Canada.*

Bound New Hampshire. Bound Vermont.

LESSON VIII.

Bound Massachusetts. Bound Rhode Island. Bound Connecticut.

Which of the New England States touch the Atlantic? Which has the longest coast-line? Which has the shortest coast-line? Which has no sea-coast?

Which of the New England States border on New York? Which border on Canada?

Where is Mount Desert' Island? Is it land or water? Is it surrounded by land or water? A body of land surrounded by water is called an *Island*.

What is a body of water surrounded by land called?

What are Martha's Vineyard (*vin'yard*) and Nantucket? Where do they lie? To what state do they belong? To what state do the islands in Lake Champlain (*sham-plain'*) belong?

What large island lies south of Connecticut? Of what state is Long Island a part? *N. Y.* Is Long Island in New England? What separates Long Island from Connecticut?

Do you see, on the Massachusetts coast, a long strip of land with a point projecting into the ocean? Such a strip, almost surrounded by water, is called a *Peninsula*; and such a point, a *Cape*. What is this cape called?

Describe Penobscot Bay. *Penobscot Bay is an arm of the Atlantic Ocean, and indents the coast of Maine.*

Describe Massachusetts Bay. Narragansett Bay.

Which New England state has the most lakes?

What is the largest lake in Maine? The largest lake in New Hampshire? (Pronounced *win-ne-pe-sok'ke*.)

What lake is on the boundary of Vermont?

What mountain in Maine? Where are the White Mountains, renowned for their grand scenery? What mountains are in Vermont?

LESSON IX.

Which is the longest river of New England? *Connecticut* means *long river*. Describe the Connecticut.

What river is the outlet of Moosehead Lake?

What two rivers have their head-waters in the White Mountains? Describe the Merrimac River.

Vert means green, *mont* means mountain. What state is named from its mountains?

On which side has Vermont a natural boundary?

What river lies on the northern boundary of Maine? What river is on its eastern boundary?

Which New England state has two capitals?

What is the capital of Maine?

Describe the situation of Augusta. *Augusta is in the southern part of Maine, on the right bank of the Kennebec River.*

What is the capital of New Hampshire?

Describe the situation of Concord.

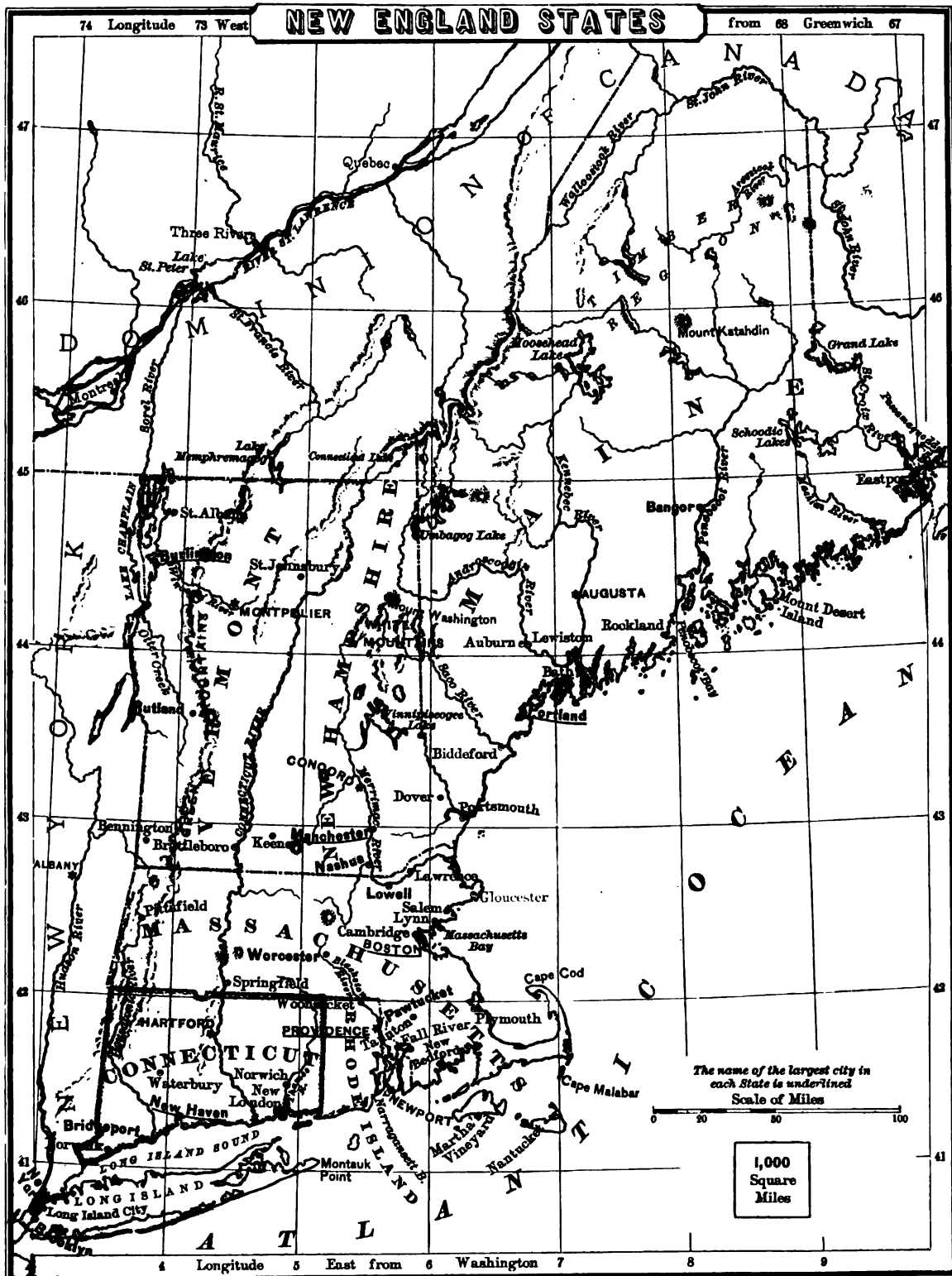
What is the capital of Vermont? How is Montpelier (*mont-peel'yer*) situated? What is the capital of Massachusetts? How is Boston situated?

Name the two capitals of Rhode Island. How is Providence situated? Newport?

Name the capital of Connecticut. Where is Hartford?

How is the largest city in each state denoted on the map? Two of the capitals are also the largest cities in their respective states; which are they?

Which is the largest city in Maine?



LESSON X.

How is Portland situated? *Portland is in the southwestern part of Maine, on Casco Bay, an arm of the Atlantic Ocean.*

Which is the largest city of New Hampshire?

Describe the situation of Man'chester.

Which is the largest city of Vermont? How is Burlington situated?

Name the largest city of Connecticut. How is New Haven situated?

Name the seven capitals of the New England States.

Mention the largest city of each state.

What important place is on the Penobscot River? Why does the name of Bangor appear in heavy letters?

What do we call a place that has a harbor on or near the ocean? *A Seaport.*

What seaport has New Hampshire?

What places in Massachusetts are next in size to Boston? Where is Lowell? Where is Worcester (*wô's'ter*)?

What place in Rhode Island is next to the capitals in importance? Where is Rutland? Bridgeport? Cambridge (*kame'bridge*)? Lewiston?

On what waters could you sail from Bangor to Bridgeport? From Boston to Hartford?

What part of Maine is a great timber region?

An arm of the ocean is sometimes called a *Sound*. Of what is Long Island Sound an arm?

In what direction is the city of New York from New England? Imagine yourself on a steamboat going from New York to Newport; on what waters will you sail? In what general direction? Point to the east. When you are opposite New Haven, in what direction will that city be from you? What island will be on your other side? For what is Newport famous? *Its fine bathing.*

WRITTEN EXERCISE.—*Complete the following:* New England lies at the — extremity of the United States. It contains — states, called —. The largest of these states is —. All the states have some sea-coast except —. The principal mountains of New England are the — in —, and the — in —. The most famous cape of New England is —, at the end of a long —. The longest river of New England is the —. It runs between the states of — and —, and across the states of — and —. The metropolis (that is, the largest and most important city) of New England is B

DESCRIPTIVE MATTER.

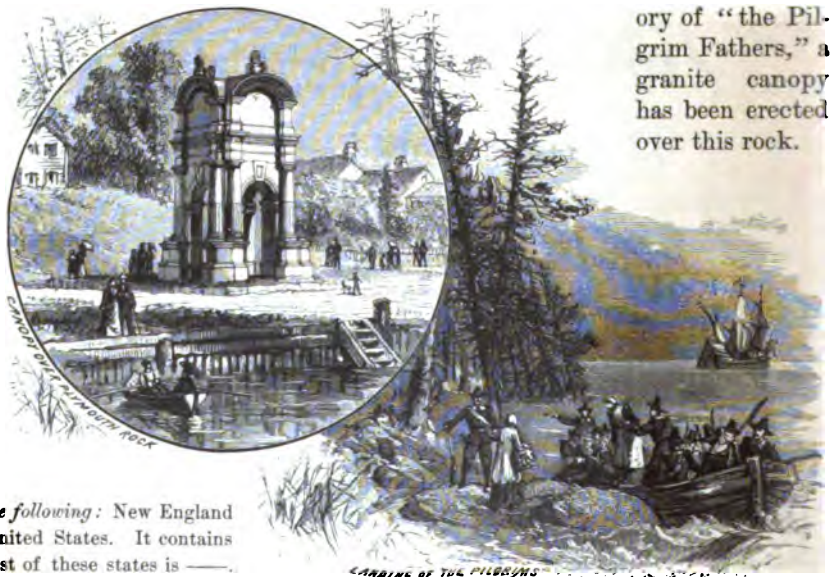
LESSON XI.

1. **The name New England** implies that there is an old England. So there is, 3000 miles away, across the Atlantic. It was from England that this part of the country was first settled.

2. It was from England that Captain John Smith, a bold rover who had fought the Turks in the Old World and the Indians in the New, sailed to explore this northern region. He called it New England, and made a map of the coast.

3. **The Pilgrims.**—Shortly afterward some brave men, with their wives and children, started from England to settle in the New World. They wanted to live where they could worship God in their own way. They had a hard voyage, but at last they landed at a place which they called Plymouth (*plim'uth*). Find Plymouth on the map.

4. **Plymouth Rock.**—The landing was made on what has since become famous as Plymouth Rock. In memory of "the Pilgrim Fathers," a granite canopy has been erected over this rock.



5. **Early History of New England.**—For some years the Pilgrim settlers endured many hardships in the wilderness. They had trouble with the Indians, and at times they almost starved. But they had stout hearts and strong hands, and

persevered till better times came. More settlers arrived. Boston and other towns were founded.

6. **Other colonies** were soon formed. Massachusetts (including Maine), New Hampshire, Connecticut, and Rhode Island, were numbered among the Thirteen Colonies at the time of the Revolution. Vermont had some settlers, who were called Green Mountain Boys, but it was not an independent colony.

The thirteen colonies which established their independence in the Revolutionary War (1775-1783), and became the thirteen original states of the Union, were New Hampshire, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Pennsylvania, Delaware, Maryland, Virginia, North Carolina, South Carolina, and Georgia.

On the settlement of the New England States, consult Quackenbos's "*American History*," pages 61-68.

New England was first permanently settled at Plymouth. The metropolis of New England is Boston.

LESSON XII.

1. **Climate.**—New England, lying so far north, has long and cold winters. If we go there in winter, we shall probably find the snow deep and the sleigh-bells ringing merrily.

2. **Surface.**—Along the Atlantic is a level strip of land. But, if we travel back from the coast, we have to go up and down hills, and at last we come to mountains. What mountains?

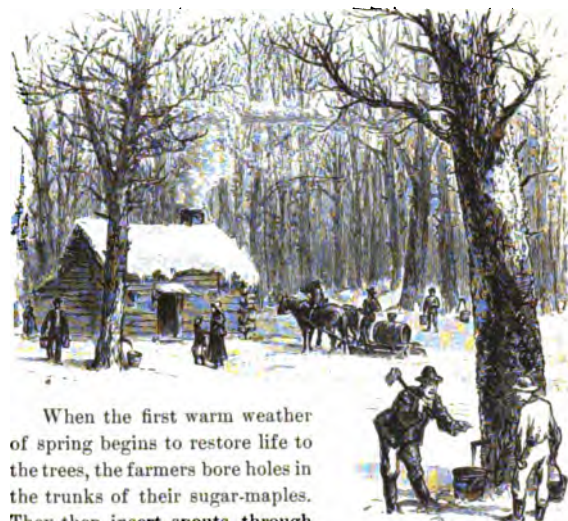
3. **Soil.**—Along the rivers are fertile valleys, and some of the hills yield good crops. But elsewhere the soil is rocky, and not fitted for tillage.

4. **Productions.**—New England lies mostly in the northern grass region. The cattle find good pasturage in summer, and hay is made in abundance for their winter use. Potatoes, corn, rye, oats, and some wheat, are raised; but not so much wheat as is needed.

5. In Vermont, especially, much attention is given to the raising of cattle, sheep, and horses. Excellent butter and cheese are made there, and many pounds of wool are clipped from the sheep that feed on the green hills.

6. **Maple-Sugar.**—Vermont is also noted for its maple-sugar. Most of our sugar is made from

sugar-cane, which grows in the South; but in New England they make sugar from the sap, or juice, of maple-trees.



When the first warm weather of spring begins to restore life to the trees, the farmers bore holes in the trunks of their sugar-maples. They then insert spouts, through which the sap trickles out into pails. The sap, collected from the pails, is next boiled down into sirup, and finally into sugar.

IN THE SUGAR-BUSH.

7. **Lumbering.**—In the north of New England are great forests. Maine, in particular, is famous for its timber. The city of BANGOR is one of the greatest lumber-depots in the country.

8. In winter men go out into the woods and cut down trees. These, with the aid of oxen, they haul to the nearest streams. When the ice melts in spring, they float the logs down to mills to be sawed into *lumber*. Getting out timber is called *Lumbering*.

9. **Occupations on the Coast.**—New England has many miles of coast, which afford good harbors. From these harbors we should expect vessels to sail, carrying out the products of the country and bringing back those of foreign lands. Where vessels are used, some are likely to be built. And on a coast abounding in cod and mackerel, we should look for many an adventurous fisherman. Accordingly, we find that

The people on the coast of New England are largely engaged in commerce, fishing, and ship-building. In the country districts, agriculture, dairying, and lumbering, are the leading occupations. Manufacturing is done chiefly in the river towns.

LESSON XIII.

1. **Commerce.**—The Foreign Commerce of New England is carried on chiefly through BOSTON and PORTLAND, which are connected by railroads with all parts of the country. There is also an active trade with other states. This is called Domestic Commerce.

2. **Lake Champlain** is the seat of considerable commerce, of which the picturesque city of BURLINGTON is the center.

3. **Exports and Imports.**—Commerce implies that native productions are sent out, or *exported*, and the products of other regions are brought in, or *imported*. New England exports her numerous manufactures, lumber, and ice; also, marble and granite, which are her most valuable minerals. She imports cotton and iron, to be manufactured, coal, flour, etc.

4. **Manufacturing** is the most important branch of industry in New England. Cotton and wool are woven into cloth. Leather is made into boots and shoes. Iron is converted into steel, machinery, and hardware. Clothing, hats, firearms, and many other useful articles, are made.

5. Massachusetts, Connecticut, and Rhode Island, are the great manufacturing states. They are also the most thickly settled states in the Union, for in manufacturing many hands are needed.



INTERIOR OF A COTTON-FACTORY.

6. **A Cotton-Factory** is an interesting place to visit. The cotton comes to it in bales, and goes out in the form of muslin. It is a wonderful

sight to look through a long room, where perhaps a hundred persons are at work, and watch the spindles twisting the cotton into thread, or the looms weaving the thread into cloth.

7. **Manufacturing Cities.**—For manufacturing purposes, sites are sought near some river that has falls or a rapid descent. Such a river is the Merrimac. It drives more machinery than any other river of its size in the world. On its banks are MANCHESTER and NASHUA, LOWELL and LAWRENCE, all of which owe their prosperity to manufactures.

8. WORCESTER and FALL RIVER in Massachusetts, PAWTUCKET and WOONSOCKET in Rhode Island, BRIDGEPORT in Connecticut, LEWISTON and BIDDEFORD in Maine, are also important manufacturing places. FALL RIVER is famous for its prints, or printed cloths, and runs more spindles than any other city in the United States. Point to these places on the map.

9. **Familiar Names** given to some of the states help us to remember what distinguishes them.

Maine is called the Pine-Tree State.

New Hampshire is called the Granite State.

Vermont is called the Green Mountain State.

Massachusetts is called the Bay State.

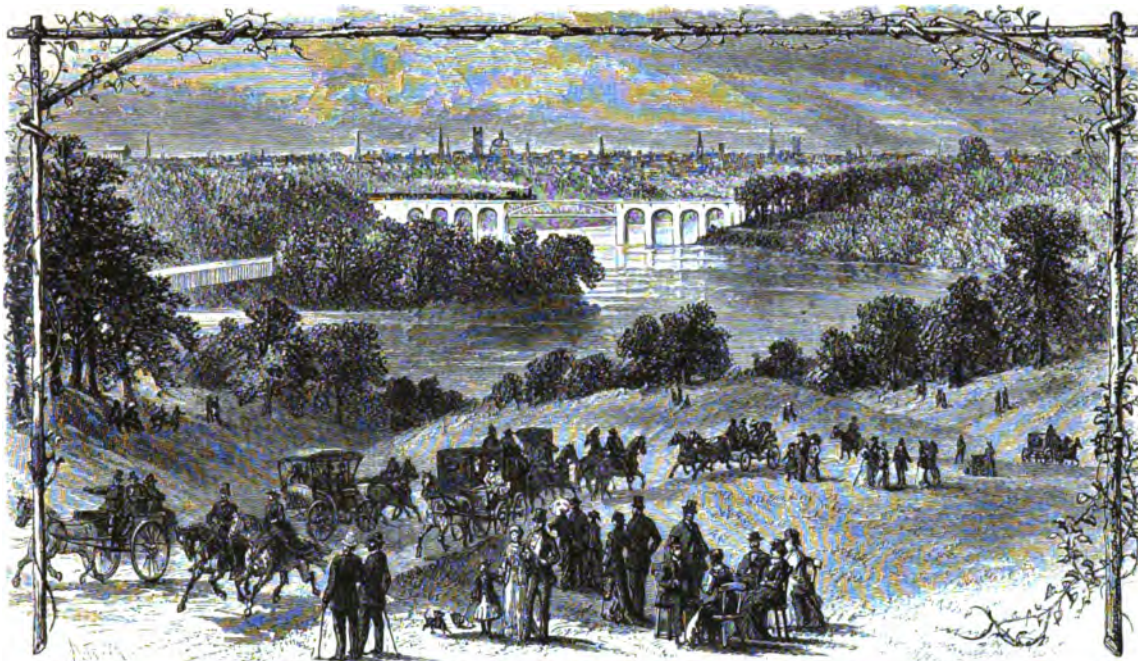
Rhode Island is called Little Rhody, because it is the smallest state in the Union.

Connecticut is the Land of Steady Habits.

The six largest cities of New England are, Boston, the sixth city of the Union in size. Providence, a great manufacturing city. New Haven, the beautiful City of Elms. Lowell and Worcester, manufacturing cities. Cambridge, the seat of Harvard University, the oldest college in the United States.

WRITTEN EXERCISE.—Complete the following: New England lies mostly on the — Slope. The soil generally is not very —, but — are raised. Sugar is made from —. The northern part is a great — region. The principal employments of the people are —. Lumbering consists in —. The most valuable minerals are —. Getting out marble and granite is called —. Massachusetts, Connecticut, and Rhode Island, are noted for their —, and for being —. Of these three states, — is the largest.

Among the manufacturing cities of New England are —; L... and S..., on the coast of Massachusetts, northeast of Boston, may also be mentioned. Lynn is noted especially for the manufacture of shoes.



PHILADELPHIA, FROM FAIRMOUNT PARK.

THE MIDDLE ATLANTIC STATES.

LESSON XIV.

1. **Middle Atlantic States.**—Leaving New England and taking a southwesterly direction, we come to another group of states. They lie on or very near the Atlantic, and are therefore *Atlantic States*. There are some Atlantic States north of them, and some south of them; therefore they are called the MIDDLE ATLANTIC STATES.

2. **Routes.**—We may go from New England to these states by railroad. Or we may take a steamboat at Burlington, and cross Lake Champlain to the State of New York. Or we may take the cars to Providence or Fall River, or to a port on Long Island Sound, whence steamboats run to the great city of New York.

Map Questions.—(See *Map of the United States*, p. 23.) In what direction is New England from the Middle Atlantic States? In what part of the United States are the Middle Atlantic States? What mountain-system traverses these states?

What large island forms part of the Middle Atlantic States? To what state does Long Island belong?

New York is the most northerly of the Middle Atlantic States: bound New York. Virginia is the most southerly of the Middle Atlantic States: bound Virginia.

Pennsylvania and West Virginia are generally classed with the Middle Atlantic States: do they touch the Atlantic?

What lake does Pennsylvania touch?

On what river does West Virginia lie?

Name from the map the seven Middle Atlantic States.

Which is the largest of the Middle Atlantic States? The smallest? The least mountainous? Which extends farthest east? Farthest west?

3. New York, which surpasses all the other states in population and wealth, is called the Empire State. Pennsylvania (*Penn's woods*) preserves the name of the good Quaker, William Penn, by whom it was founded. Virginia, in which the first permanent English settlement in the country was made, is called the *Old Dominion*. West Virginia was formed from Virginia. New Jersey is noted for its watering-places, and the fine ocean-bathing they afford.

To the Middle Atlantic group belong the two most populous states in the Union—New York and Pennsylvania: also, the three largest cities—New York, the commercial metropolis of the New World, Philadelphia, and Brooklyn.

QUESTIONS ON THE OPPOSITE MAP.

LESSON XV.

Which of the Great Lakes border on New York?

What river connects Lake Erie with Lake Ontario? In what direction does the Niagara River flow? Could you sail all the way down it? Why not?

What river is the outlet of the Great Lakes?

On what state does the St. Lawrence border?

What picturesque islands are in the St. Lawrence?

What lake is on the eastern boundary of New York?

What lake, a favorite resort in summer, is connected with Lake Champlain? What other lakes are in New York? What mountains are in New York?

What great canal crosses New York? What lake and river does the Erie Canal connect?

What is the principal river of New York? Describe the Hudson River. What is the chief branch of the Hudson? What places are on the Hudson?

What is the capital of New York? Where is Albany?

What is the largest city of New York and of the United States? How is New York City situated? Point toward it. In what direction are you from it?

The second city of New York in size is Brooklyn. How is Brooklyn situated? How do persons go from the city of New York to Brooklyn?

The third city in size is Buffalo. Where is Buffalo?

Bound Pennsylvania. Name its chief mountains.

What large branch of the Mississippi is formed in Pennsylvania? What two rivers form the Ohio? What two cities stand at their junction?

What is the capital of Pennsylvania? How is Harrisburg situated?

Name the metropolis of Pennsylvania, the second city of the Union in size. At the junction of what two rivers does Philadelphia stand? Point toward this city.

What lake-port has Pennsylvania?

Describe the Susquehanna River. The Delaware.

LESSON XVI.

From what state does the Delaware River separate Pennsylvania? Bound New Jersey.

What cape projects from the south of New Jersey?

What is the capital of New Jersey? Describe the situation of Trenton. Of Paterson.

What is the largest city of New Jersey? How is Newark situated?

What large city of New Jersey is opposite New York? What river separates them? What city is opposite Philadelphia? What river separates them?

What watering-place is on the coast of New Jersey? What cape is opposite Cape May? At the entrance of what bay do these capes stand?

Bound Delaware. Name its capital; its chief city.

How is Dover situated? Wilmington?

What state bounds Delaware on two sides?

Bound Maryland. What mountains cross Maryland?

What bay nearly divides Maryland?

What is the part east of Chesapeake Bay called?

What is the capital of Maryland? How is Annapolis situated? What is the metropolis of Maryland?

How is Baltimore situated? Frederick? Cumberland?

What District is almost surrounded by Maryland?

What noted city is in the District of Columbia?

Map-drawing.—Copy the small map of the District of Columbia and its vicinity, on p. 22. Show the Potomac River, Washington, and Alexandria.

LESSON XVII.

Describe the Potomac River. In what state is the Potomac included? *In Maryland, which extends to low-water mark on the Virginia side of the river.*

What two capes are at the entrance of Chesapeake Bay? In what state are Cape Charles and Cape Henry?

Bound Virginia. What mountains lie on its border?

What mountains are east of the Alleghanies?

Name four rivers of Virginia. Describe the James.

What is the capital and largest city of Virginia? How is Richmond situated?

What is the chief seaport of Virginia?

How is Norfolk situated? Petersburg?

What state lies on the western slope of the Alleghany Mountains? Bound West Virginia.

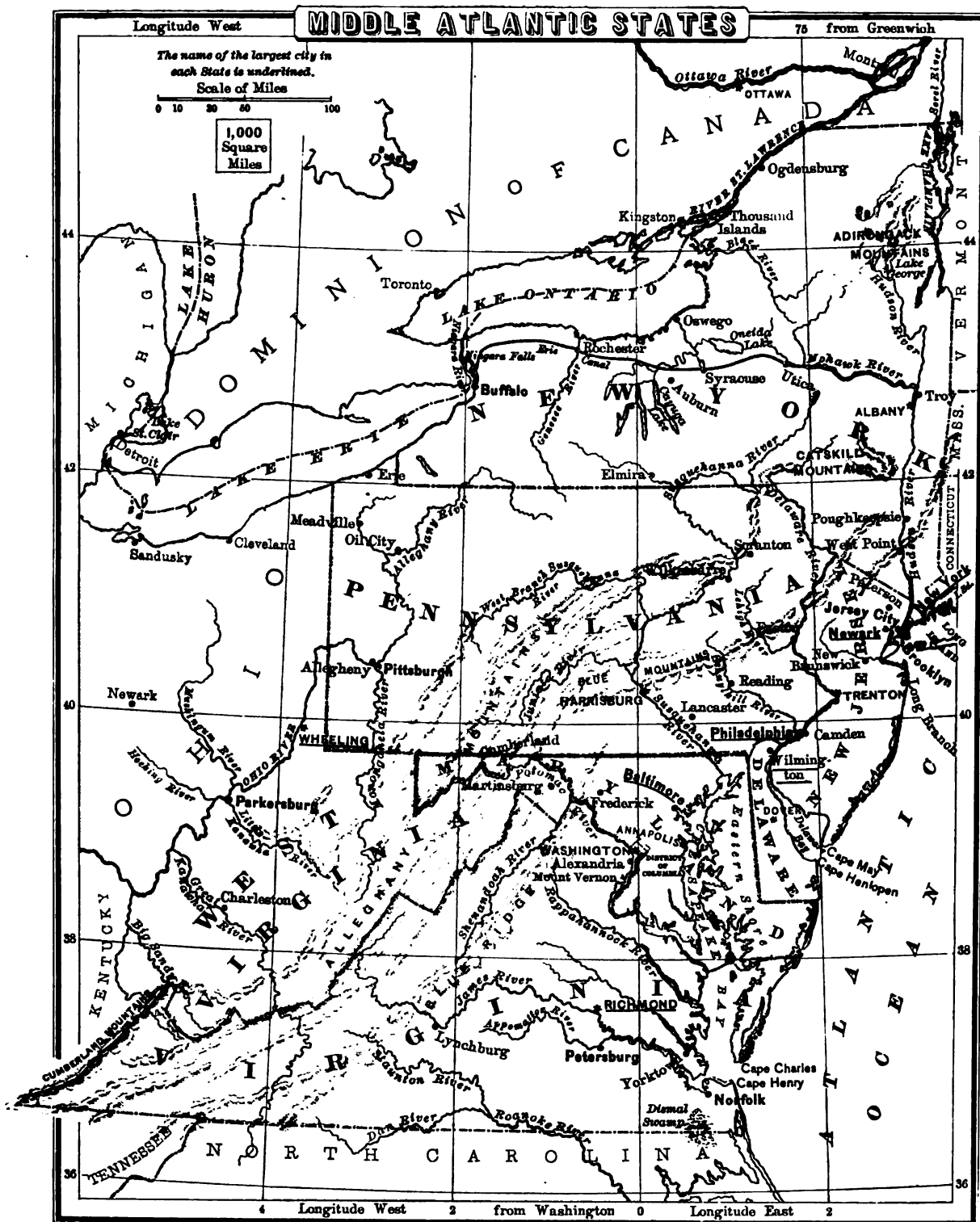
What is the capital and chief city of West Virginia?

How is Wheeling situated? Parkersburg? Charleston?

Review.—Let each pupil make a table of four columns. In the 1st column place the names of the six New England States in the order in which they were bounded. Opposite each state, in the 2d column write the name of its capital, and in the 3d column that of its largest city. In the 4th column insert the name of the largest river in the state or on its boundary. Thus:—

State.	Capital.	Largest city.	Largest river.
MAINE,	Augusta,	Portland,	St. John.

At recitation, one of the class may be called on to write the names of the states on the board. As the name of each state is written, the pupils may be called on promiscuously to tell its capital, largest city, and largest river.



DESCRIPTIVE MATTER.

LESSON XVIII.

1. **Comparative Size.**—Compare the maps on pages 27 and 33. Are the squares that represent 1,000 square miles the same size? Which is the larger? This shows that the map of New England is on the larger scale.

We must not be misled by this. New York, Pennsylvania, and Virginia, are each larger than Maine, though they look smaller on the map.

2. **Climate.**—This group of states stretches so far from north to south that there is a great variety of climate. Northern New York is cold, like New England. As we go south, the climate grows warmer. In southern Virginia, except on the highlands, it is very mild; snow seldom falls.

3. **Surface.**—A level strip, called the *Atlantic Plain*, borders the ocean. From this the land rises to the tops of the Appalachian Mountains. Thence it slopes, on the western side, for the most part, toward the Ohio River and Lake Ontario.

Name three rivers that descend this slope to the Ohio. Name two that flow into Lake Ontario.

Five rivers, however, make their way through the mountains to the Atlantic. Name them.

4. **Scenery.**—Where these rivers break through the mountains, there are high banks and fine views. The Highlands of the Hudson, near West Point, present most beautiful scenery.

5. **Niagara Falls.**—This section contains some grand waterfalls. The most celebrated are the Falls of Niagara, which people come to this country from all parts of the world to see.

Lake Ontario is 333 feet lower than Lake Erie. The Niagara is a wide river that connects them. In its short course it falls 333 feet. First is a succession of boiling rapids. Then the great mass of waters plunges 150 feet or more over a rocky ledge, sending up clouds of spray.

6. **The Adirondack Mountains** and the regions near them, west of Lake Champlain, are covered with forests and dotted with lakes. Many go there every summer to hunt and fish. Wolves, deer, bears, and panthers, are found there.

7. **Agriculture, etc.**—The people in all these states are largely engaged in farming. Dairying, with its products of butter and cheese, receives much attention in New York, Pennsylvania, and West Virginia. Lumbering is carried on in forest districts, and many are engaged in mining coal and iron.



TOBACCO.

8. **Agricultural Products.**—In the north, hay, potatoes, and oats, are the principal crops; barley, buckwheat, and rye, are also raised. Going south, we soon reach the wheat-belt.

and after that the corn and tobacco region.

9. **Market-Gardening.**—The great cities of this section use enormous quantities of vegetables and fruit. To supply them keeps many farmers busy.

Large tracts on Long Island and in New Jersey are laid out in market-gardens; New Jersey, indeed, is called the Garden State. Maryland and Delaware are famous for their excellent strawberries and peaches. Even from as far south as Norfolk, steamers carry cargoes of early peas, tomatoes, berries, melons, etc., to the New York markets.

New York yields more hay, potatoes, buckwheat, and dairy products, than any other state.

Virginia and Maryland are great tobacco-raising states.

LESSON XIX.

1. **Mineral Treasures** abound in the Middle Atlantic States. Coal-fields cover one-fourth of Pennsylvania, two-thirds of West Virginia, and parts of western Maryland and of Virginia.

2. **Iron.**—When iron-ore is taken from the earth, it contains various substances besides iron. To separate these, it has to be *smelted* in furnaces (see engraving on p. 12), and for this purpose

coal is used. Pennsylvania abounds in both the ore and the coal for smelting it, and so produces nearly half the pig-iron (iron in pigs or bars) made in the United States. Each of the Middle Atlantic States contains valuable iron deposits.

3. **Petroleum**, or rock-oil, is another important mineral product of Pennsylvania and West Virginia. It is pumped up from wells sunk in the earth. Petroleum is used for making kerosene and gas, for oiling machinery, etc. What place in the northwest of Pennsylvania gets its name from the abundance of petroleum produced near it?

4. **Salt**.—New York surpasses the other states in the production of salt. Find SYRACUSE. In and near this city are large wells, from which brine is obtained. Salt is made by evaporating the brine.

5. **Manufacturing** is very largely carried on. NEW YORK and PHILADELPHIA take the lead in this important branch of industry. BALTIMORE has many large manufactories, including iron-works and establishments for packing oysters, fruits, and vegetables.

6. **Manufacturing Cities**.—PITTSBURGH, the second city of Pennsylvania in size, is noted for its manufactures of iron. NEWARK and JERSEY CITY are important manufacturing cities of New Jersey. ROCHESTER, situated in western New York, at the falls of the Genesee River, has numerous flouring-mills and other factories. TROY stands foremost in the production of stoves.

7. RICHMOND, the picturesque capital of Virginia, at the lower falls of the James River, is famous for its large flouring-mills, iron-works, and tobacco-factories. WHEELING, the capital of West Virginia, also owes much of its importance to manufactures. WILMINGTON, in Delaware, has celebrated powder-mills and car-works.

LESSON XX.

1. **Commerce**.—The Middle Atlantic States are the chief seat of foreign commerce. They contain the important commercial cities of New York, Philadelphia, and Baltimore. Numerous railroads, including great trunk lines from the West, terminate at these cities, and bring in large quantities of grain and provisions to be shipped abroad. An active domestic commerce is also carried on from these and other cities.

2. **New York**.—More than half the foreign commerce of the country centers at New York. This city lies mainly on Manhattan Island, at the mouth of the Hudson. It has a noble harbor.

3. The Hudson is navigable to Albany and Troy, and there the Erie Canal connects it with Lake Erie. Another canal connects the Hudson with Lake Champlain. Thus there is water communication all the way from the Great Lakes and Canada to the metropolis. This has helped to make New York the great city it is.

4. **Other Commercial Cities**.—BUFFALO, one of the chief lake-ports, has an immense trade

in grain and live-stock. BROOKLYN has spacious storehouses and is an important grain-depot. NORFOLK, the chief seaport of Virginia, is a shipping-point for fruit and vegetables, cotton and oysters. The oysters come from Chesapeake Bay and the waters connected with it.



DREDGING FOR OYSTERS IN CHESAPEAKE BAY.

The six largest cities of the Middle Atlantic States:

New York, the Empire City.
Philadelphia, the City of Brotherly Love.
Brooklyn, the City of Churches.
Baltimore, the Monumental City.
Buffalo, the Queen City of the Lakes.
Pittsburgh, the Iron City.

THE SOUTHERN STATES.

LESSON XXI.

Keeping on to the south, we enter a new section of the Union, composed of the SOUTHERN STATES.

Turn to the map of the United States, p. 23. Going west along the southern boundary of Virginia, keep on to the Mississippi River. Cross this river into Arkansas, and continue west across Indian Territory. All the states south of this line, to the Gulf of Mexico and the Rio Grande, are called Southern States.

Map Questions.—(See *Map of the United States*.) What territory is treated along with the Southern States? *Ind. Terr.*

Which are the three most northerly of the Southern States? *N. C., Tenn., and Ark.*

Which two extend farthest south?

Which four of the Southern States border on the Atlantic? Which five border on the Gulf of Mexico? Which two border on neither? Which lie east of the Mississippi? Which, west? Which lies farthest west?

Which southern state is the largest? The smallest? Which is a peninsula? Which touches Mexico? Which touch Virginia?

What river separates Arkansas from Mississippi? What state contains the mouths of the Mississippi? Point toward them.

What river separates Texas from Mexico? Texas from Louisiana?

In what direction is Texas from you?

Bound Texas. What is the general slope of the state? What is the capital of Texas? How is Austin situated?

The largest city of Texas is on an island of

the same name as itself; what is its name? Which way is Galveston from Washington? Describe the Colorado River. From what does the Red River separate Texas?

Bound Indian Territory. What rivers traverse it? Which of these is the longest?

What capital of one of the Indian tribes is the chief place in the territory? T. How many other territories are there in the United States?

QUESTIONS ON THE OPPOSITE MAP.

LESSON XXII.

Name the ten Southern States. Which is the most northeasterly?

Bound North Carolina. What noted cape is on the coast of North Carolina?

What two other capes are on the North Carolina coast? What do these names indicate?

What is the capital of North Carolina? What is its largest city? How is Raleigh (*raw'le*) situated? Wilmington?

Bound South Carolina. What is its capital? On what river is Columbia? *Columbia is on the Congaree, one of the rivers that form the Santee.*

What is the largest city of South Carolina? How is Charleston situated? Point toward it.

From what state does the Savannah River separate South Carolina? Bound Georgia.

What part of Georgia is mountainous? What is the capital and largest city of Georgia? How is Atlanta situated?

Name the chief seaport of Georgia. On what river is Savannah?

What state is south of Georgia? Bound Florida. What lake is in the south of Florida? What cape?

Name the capital of Florida. How is Tallahassee situated? What is the largest city of Florida? How is Jacksonville situated?

Bound Alabama. What river traverses northern Alabama? Name the capital of Alabama. How is Montgomery situated?

What is the largest city of Alabama?

On what bay is Mobile (*mo-bel'*)?

What state lies west of Alabama?

Bound Mississippi. Name its capital.

How is Jackson situated? Name the largest city in the state. Where is Vicksburg?

What state lies north of Mississippi?

Bound Tennessee. What mountains are in Tennessee? What rivers? Name the capital of Tennessee. Its largest city.

How is Nashville situated? Memphis?

What two southern states have the Mississippi on their eastern boundary? Which is the more northerly? Bound Arkansas.

What is the capital and largest city of Arkansas? How is Little Rock situated?

Bound Louisiana. What two rivers separate it from Mississippi?

What is the capital and metropolis of Louisiana? How is New Orleans situated?

How is Shreveport situated?

What southern state is not shown on this map? Which way is Texas from Louisiana?

What are *Keys*? *Low islands.*

Where are the Florida Keys? What city of Florida is on one of them? What are obtained there? *Green turtles, from which turtle-soup is made, and sponges. Perhaps the sponge you clean your slats with came from the Florida Keys.*

Mention the sounds and bays that indent the coast of the Southern States.

Review.—1. Let each pupil make a Table of four columns, containing respectively the names of the Middle Atlantic States, their capitals, largest cities, and largest rivers, as shown on p. 32. Recite as there suggested.

2. Prepare a similar Table for the Southern States, and recite as suggested.

DESCRIPTIVE MATTER.

LESSON XXIII.

1. **The ten Southern States** comprise the southern and warmest part of the Union. Among them is Texas, the largest of all the states. Texas is four times the size of New England, but in some parts there are very few inhabitants.

2. **History.**—The Carolinas and Georgia were among the original thirteen states. They took a gallant part in the Revolution. At one time the British thought they had subdued the Carolinas, but at last they were driven out.

3. Florida was bought from the Spanish, who were the first settlers on the mainland of America. ST. AUGUSTINE (*aw-gus-teen'*), on the Florida coast, is the oldest town in the United States.

4. Louisiana, Arkansas, and a vast region north of them, were bought from the French. Texas once belonged to Mexico, but gained its independence after a hard struggle. It adopted a single star for its emblem, and since its admission to the Union it has been styled the Lone Star State.

5. **Surface.**—The Southern States are comparatively level and low. The southern part of Louisiana is but little higher than the Mississippi. When floods, or freshets, occur, it would be overflowed were it not for banks, called *levees*, built for many miles along the river. Sometimes these are broken, and great damage is done.

6. **Swamps.**—In the low grounds near the coast are large swamps. Dismal Swamp extends from Virginia into North Carolina. Its soil is soft and black. The Everglades in Florida consist of similar swamps, overgrown with coarse grass and palmettoes.

7. Sometimes these swamps are threaded by bayous (*bi'ooz*), or channels connecting some river or lake with the Gulf, in which lazy alligators (*turn to engraving, p. 10*) may be seen sunning themselves. Mississippi is called the Bayou State.

8. **Mountains.**—Going back from the coast, however, we find hilly, and even mountainous, sections. The Cumberland Mountains and other ranges of the Appalachian System run through East Tennessee. The Alleghanies and the Blue

Ridge cross the western part of North Carolina. Here we have the highest peak east of the Mississippi. It is called Mount Mitchell.

9. **Climate.**—The climate is warm and genial. Many sick persons go south, particularly to South Carolina and Florida, to avoid the northern winter and spring.

The Southern States consist in great part of low plains. Texas is the largest state in the Union. St. Augustine, Florida, is the oldest town in the United States.

Map-drawing.—Copy the outline of Tennessee from the map on p. 36, making the scale twice as large. Get the proper dimensions and distances by measuring those on the map and doubling the measures obtained.

Write the names of the bounding states outside of the outline, where they belong. Insert the Cumberland Mountains, the Cumberland River, and the Tennessee River. Locate Nashville, Memphis, Chattanooga, a busy railroad center, and Knoxville, the principal place in East Tennessee.

Imagine yourself on a steamboat at Chattanooga, going down the river—what river? What state would you soon enter? What shoals would you reach? Taking another steamboat west of the shoals, which are not navigable, between what states would you soon pass? What state would you then enter? What river would you at last reach?

LESSON XXIV.

1. **Industrial Pursuits.**—There are some valuable mineral deposits—especially of gold in the Carolinas and Georgia, and other minerals in North Carolina; but mining is not a leading pursuit. Manufactures are increasing, but the South is not a manufacturing region. Commerce engages some attention. But throughout the Southern States the chief pursuit is agriculture, to which their fertile soil and warm climate adapt them. The farms are large, and are called *plantations*.

2. **Agricultural Products.**—The northern part of this section is in the tobacco-belt. Wheat flourishes in the uplands, but corn is the leading grain. Rice is raised in the lowlands, particularly in South Carolina, Louisiana, and Georgia. Sweet-potatoes abound in all parts.

3. **Sugar-Cane** is a great staple of Louisiana. The cane is crushed in mills (*see engraving, p. 14*).

The juice thus extracted is boiled down. From the scum which rises and is removed, rum is distilled. The sugar forms in grains, and the liquid that drains from it is molasses.

4. **Cotton.**—But of all the products of the Southern States, cotton is the most important. The people of warm countries dress mostly in cotton goods. The cotton-factories of the world keep thousands of hands employed, and for their supply of cotton rely mainly on our Southern States. Texas produces the most cotton.

5. **Fruits.**—The fig, and in the more southerly sections the orange, lemon, and lime, flourish. The beautiful orange-groves of Florida are famous for their excellent fruit, which forms one of the most important exports of that state.

6. **Forest Trees.**—Pine forests are a source of wealth to certain districts. The stately cypress grows in the swamps. South Carolina from its palmettoes gets the name of the Palmetto State. Florida and Georgia are noted for their live-oak, much prized in ship-building.

WRITTEN EXERCISE.—*Complete the following:* New York is called the ——. It belongs to the group of — States, which lie along the —, between — on the northeast and the — States on the southwest. This group contains the three largest — of the Union. Pennsylvania is noted for its —. West Virginia was once included in —. The Potomac River belongs to the state of —. On it is the city of —, the capital of —. The Military Academy of the United States is at West Point, on the — River. The Naval Academy of the United States is at Annapolis, the capital of —. New-ark is the metropolis of —; Wilmington, of —.

LESSON XXV.

1. **Stock-raising** is a leading pursuit in Texas. There are large *ranches*, or stock-farms, on which immense numbers of cattle, sheep, and horses, are raised. Grass is abundant, and the climate is so warm that stock does not need housing in winter.

2. Texan beef goes to northern markets, and is even shipped across the Atlantic. Some of it is packed in cans.

3. **Pine Products.**—Pine is useful for the lumber made from it. But there are some kinds of pine in the South, valuable for the turpentine,

tar, pitch, and rosin, which are obtained from them.

4. The great turpentine district is on the North Carolina coast. WILMINGTON is its shipping-point. Another turpentine region is on the coast of Georgia.



A FLORIDA ORANGE-GROVE.

5. **New Orleans**, built on a bend of the Mississippi shaped like a crescent, is called the Crescent City. Its situation makes it the metropolis of the Southwest and the seat of a large foreign commerce. It is the great cotton-market of the world, and the chief sugar-market of the United States.

6. **Other Cities.**—The shipping of cotton makes several of the southern seaports—CHARLESTON, MOBILE, SAVANNAH, and GALVESTON—active centers of commerce.

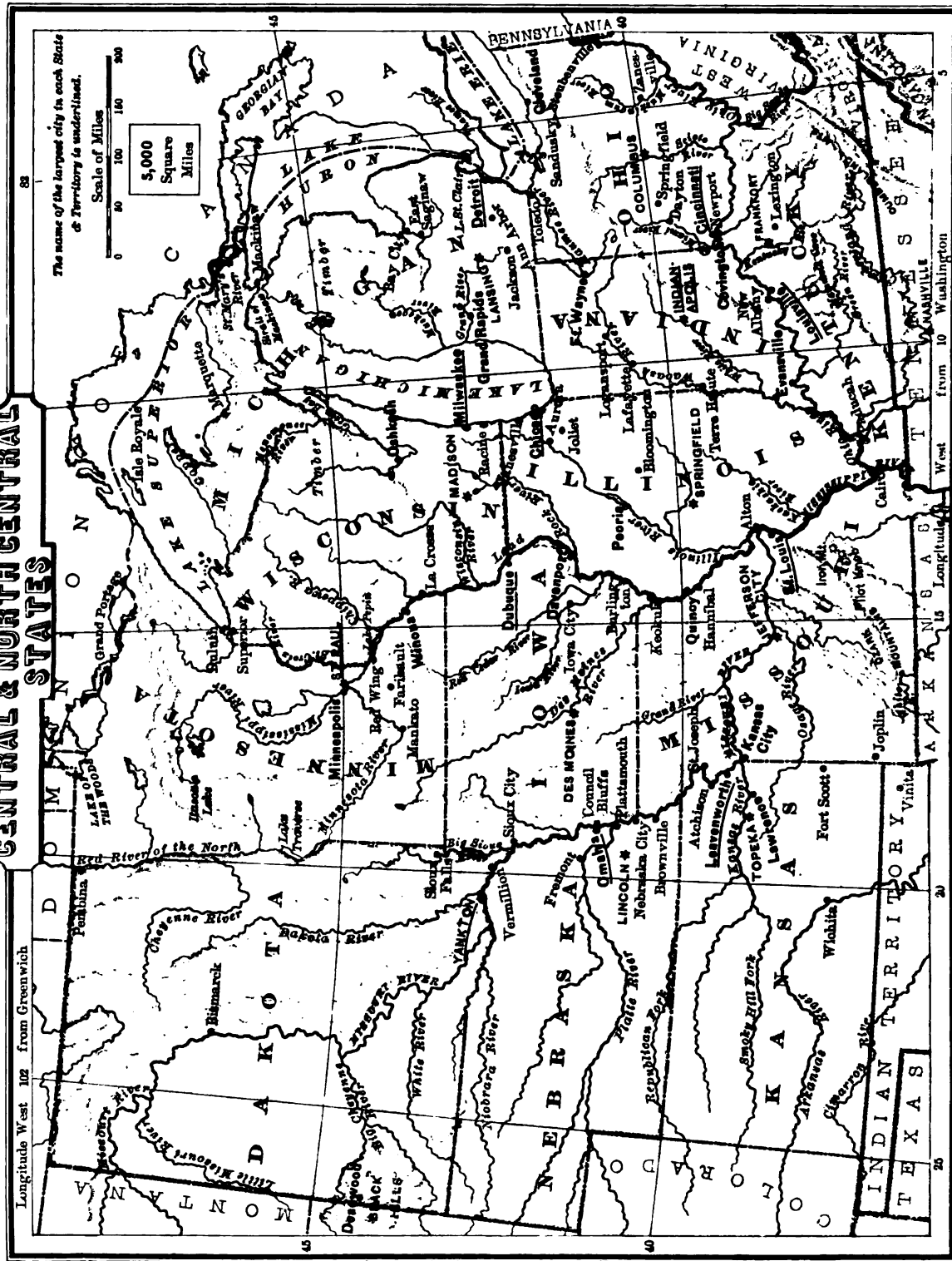
7. Many river-ports, also, are largely engaged in the shipment of cotton and the importation of planters' supplies. Among these are MEMPHIS and VICKSBURG. ATLANTA is one of the busiest cities of the South; five railroads center there.

The Southern States are the great cotton-fields of the world. South Carolina is the rice state. Louisiana is the sugar state.

33

33

The name of the largest city in each State & Territory is underlined.

5,000
Square
Miles

THE CENTRAL AND THE NORTH CENTRAL STATES.

LESSON XXVI.

Turn to Map of United States, p. 23. Going north from the Southern States, we reach Kentucky, Missouri, and Kansas.

Kansas contains the central point of the Union; and these three states, midway between the northern and the southern boundary, may be called CENTRAL STATES.

North of these are the NORTH CENTRAL STATES, extending to the Dominion of Canada. Ohio is the most easterly of the North Central States; Nebraska, the most westerly.

In what direction are the North Central States from the Middle Atlantic States? From New England?

On the opposite page is a map of the Central and the North Central States on a larger scale.

QUESTIONS ON THE OPPOSITE MAP.

- What state is north of Tennessee?
- Bound Kentucky. Name its rivers.
- What is the capital of Kentucky? How is Frankfort situated?
- What is the metropolis of Kentucky? How is Louisville situated?
- What state is crossed by the Missouri River? Bound Missouri.
- What is the capital of Missouri? How is Jefferson City situated?
- What is the largest city of Missouri? How is St. Louis situated? What river flows into the Mississippi just above St. Louis?

- What mountains are near St. Louis?
- What state lies west of Missouri?
- Bound Kansas. Mention its rivers.
- What is the capital of Kansas? How is Topeka situated?
- What is the largest city of Kansas? How is Leavenworth (*lən-ən-wurth*) situated?

LESSON XXVII.

What bounds Nebraska on the north? Dako'ta is a territory—the only one shown on this map. How many North Central States do you find?

Do you live in one of the North Central States? If not, point toward them.

What three states have the Ohio River on their southern boundary? Bound Ohio.

What is the capital of Ohio? How is Columbus situated? What is the metropolis of Ohio? Where is Cincinnati (*sin-ēn-nah'ti*)?

Which is farther north, Cincinnati or Leavenworth? Cincinnati or Louisville?

Where have we met with the Ohio before?

What state is west of Ohio? Bound Indiana. What two rivers are in Indiana?

What is the capital and largest city of Indiana? How is Indianapolis situated?

What five lakes belong partly to the North Central States and partly to Canada?

Which of these belong to the group of Great Lakes?

Which of the Great Lakes does not touch the Dominion of Canada? What four states border on Lake Michigan?

Bound Illinois (*il-le-noy*). What is the capital of Illinois?

How is Springfield, "the Flower City," situated? Springfield is a little west of the center of the state.

- Name the metropolis of Illinois. How is Chicago (*shē-kaw-go*) situated?
- What rivers on this map have names like states?

LESSON XXVIII.

What mountains lie on the boundary between Kentucky and Virginia?

What mountains are in Missouri?

How are the Black Hills situated?

Which of the North Central States lie east of the Mississippi River?

Which is made up of two peninsulas?

Bound Michigan. Name the capital of Michigan. How is Lansing situated?

What is the largest city of Michigan? How is Detroit situated? Point toward Detroit.

What lakes are connected by the St. Mary's River? By the Strait of Mackinaw?

Between what lakes is Lake St. Clair?

What state lies west of Lake Michigan? Bound Wisconsin.

What is the capital of Wisconsin? In what part of the state is Madison?

What is the largest city of Wisconsin? How is Milwaukee situated?

Name three ports on Lake Michigan.

Which of the North Central States lie west of the Mississippi? Which lies on both sides of the Mississippi?

What river rises in Lake Traverse? What other Red River have we found?

Bound Minnesota. Name its capital and largest city. How is St. Paul situated?

What city, just above the capital, is nearly as large as St. Paul?

Name three ports on Lake Superior. In what state is each?

Describe the situation of Kansas City. Of Quincy. Of Peoria. Of Fort Wayne.



LESSON XXIX.

What state lies mostly between the Mississippi and the Missouri? Bound Iowa.

What is the capital of Iowa? How is Des Moines (*de-moin'*) situated? What is the largest city of Iowa? How is Dubuque (*du-buke'*) situated?

What state has the Missouri for its eastern boundary? Bound Nebraska.

Name the capital and the largest city of Nebraska.

Describe the situation of Lincoln.

How is Omaha (*o'ma-haw*) situated? Which is farther north, Omaha or Chicago?

On what waters could you sail from Cleveland to Milwaukee? From Omaha to Cincinnati?

What large river traverses Nebraska? Kansas? In what mountains do the Platte and the Arkansas rise? Into what does each flow?

What territory is shown on this map? Bound Dakota. What rivers traverse Dakota?

What is the capital of Dakota? Its largest city?

How is Yankton situated? Deadwood? Davenport?

Describe the situation of Cleveland, called "the Forest City" from its beautiful shade-trees.

Where is Burlington? In what other state is there a Burlington? Which of these is farther north?

Suppose yourself to be sailing down the Mississippi River, from St. Paul to St. Louis. What places on the right will you pass? What places on the left?

Reviews.—1. Let each pupil make a Table of four columns, containing respectively the names of the Central States, their capitals, largest cities, and largest rivers, as shown on p. 32. Recite as there suggested.

2. Make such a Table for the North Central States.

Map-drawing.—Draw an outline of Kansas on a scale of 40 miles to an inch. On this scale, how many inches will represent 400 miles? 10 miles? 410 miles?

Represent a southern boundary 410 miles long, and a western boundary of 210 miles. From the northwestern extremity draw a straight northern boundary of 373 miles (on the scale selected, $9\frac{1}{4}$ inches). From the southeastern extremity draw a straight eastern boundary of 145 miles ($3\frac{1}{4}$ inches). Draw that part of the Missouri River which forms the northeastern boundary.

Write the names of the bounding states and territory where they belong. Insert the Kansas River and its Forks. Locate Topeka, Leavenworth, and Lawrence.

WRITTEN EXERCISE.—Complete the following: The Southern States extend north from the — to the states of —. They lie partly on the — Slope, and embrace the lower part of the — Valley. The climate is —, and the soil is very —. The staple production of the South is —. North Carolina is noted for its —; South Carolina, for its —; Florida, for its —; Louisiana, for its —. Great numbers of cattle are raised in —. The principal cotton-ports are —.

DESCRIPTIVE MATTER.

LESSON XXX.

1. **History.**—A hundred years ago, this region contained no great grain-farms or cities. The United States owned as far as the Mississippi, but there were only scattered forts and trading-posts. It was not till after the Revolution that many settlers crossed the Alleghanies.

2. **The Indians** did not give up their hunting-grounds without a struggle; but at last they had to yield. They have left names full of meaning, however, stamped on many streams, and lakes, and hills, and even on the states themselves. Ohio (*beautiful*), Wisconsin (*wild, rushing torrent*), Minnesota (*cloudy water*), etc., are Indian names.

3. **The Great West** was at first on the east bank of the Mississippi. But when a vast region beyond this river was bought from France, the Mississippi Valley became the *central* part of the United States. Multitudes were attracted by its smiling lands. Railroads developed the country. Cities sprung up. Their rapid growth has been the wonder of the world.

4. **"The Lake State"** is the familiar name given to Michigan. It might also be applied to Wisconsin and Minnesota; for these states, like Michigan, not only border on the Great Lakes, but have hundreds of smaller sparkling lakes within their boundaries.

5. **Lake Navigation.**—The Great Lakes are navigable throughout. In the St. Mary's River, which connects Lakes Superior and Huron, are rapids, but a ship-canal has been built around them.

6. A canal has also been constructed in Canada, connecting Lake Erie and Lake Ontario, so that vessels can pass from the one to the other notwithstanding the Falls of Niagara. Thus there is water communication from the head of Lake Superior to the St. Lawrence River, and down the St. Lawrence to the Atlantic Ocean.

7. **Surface.**—Prairies are extensive level or rolling tracts, covered with grass, but without a tree. Prairie-land usually has a deep, rich soil, and when tilled yields heavy crops.

8. Most of Kansas and the North Central States consists of prairie-land. There are hills in some parts, and in eastern Kentucky and southern Missouri mountains of no great height. The borders of the rivers are well wooded, and the northern part of Michigan and Wisconsin is heavily timbered.

Kansas and the North Central States are mostly rich prairie-land. The Ohio Valley is large and very fertile.

LESSON XXXI.

1. **Mammoth Cave.**—Kentucky contains one of the greatest natural curiosities in the world. It is Mammoth Cave—near what river (*see map*)? This cavern extends nine miles into the earth, and to visit all its parts one would have to travel a hundred and fifty miles. It has wonderful domes and waterfalls, deep pits, and lakes and rivers with eyeless fish.

2. **Minerals.**—What state did we find full of coal and iron? Missouri is another state that abounds in these minerals. It has two mountains, Pilot Knob and Iron Mountain, made up entirely of iron-ore. In what part of the state are they?

A valuable coal-field extends through Illinois and Indiana, into Kentucky. Southeastern Ohio, and the Des Moines Valley in Iowa, are also rich in coal. Iron is abundant in Wisconsin.

3. Iron and copper are a source of great wealth to Michigan. They are found in the northern peninsula. The Michigan copper-mines are the richest in the world. They were worked before white men ever saw them. It is believed they were known to a race skilled in many of the arts, who occupied the Mississippi Valley before the Indians. Large quantities of salt are made near EAST SAGINAW.

4. Where Illinois, Wisconsin, and Iowa join, is a great lead region; DUBUQUE is its commercial center. Point to this lead region on the map.

5. The Black Hills, in Dakota, contain gold and other mineral deposits.

6. **Agricultural Products.**—Kentucky is the leading state in the production of tobacco and hemp; Iowa, in that of flax.



HEMP—LEAVES AND FLOWER.

Hemp is used in making rope.—From the fibers about the hollow stems of flax, linen thread is manufactured. From the seed linseed-oil is expressed, and what is left is made into oil-cake for fattening cat-



CINCINNATI.

tle.—Tobacco was not known in the Old World till after the discovery of America. The practice of smoking it came from the Indians. One of Sir Walter Raleigh's ships first carried tobacco and the potato to the Old World. While the potato was still hardly known, tobacco had come into common use in most of the countries of Europe.

7. **Wheat.**—The greater part of the North Central States lies in the wheat-belt. This is the finest wheat region of the world. Millions of bushels more than are needed for home use are raised every year, and sent to other nations whose crop is short. The numerous railroads, the Great Lakes, the Ohio River, and the Mississippi, afford the means of transporting it.

8. **Indian Corn**, or maize, is a staple product of all these states—the leading product of several of them, including the Central States. Oats also are extensively raised.

9. **Other Products.**—Sorghum, or Chinese sugar-cane, from which molasses is produced and sugar is beginning to be made, is an important crop. Grapes flourish, and wine is manufactured. Michigan is a great fruit state.

10. **Live-Stock.**—The raising of live-stock is a leading industry throughout this section. Wool and salted pork are largely exported.

The Central and the North Central group embrace the great corn and wheat states. They have the richest copper and lead mines.

Illinois produces the most corn; Kentucky, the most tobacco.

WRITTEN EXERCISE. — *Complete the following:* The Central States lie between the — States on the south and the — States on the north. There are some mountains in — and —; but Kansas is mainly prairie-land, like the — States. Michigan borders on five lakes; namely, —. The principal lake-ports are —. To go by water from Kansas City to Pittsburgh, we should have to sail on the — rivers. The lead region lies on both sides of the —. The copper-mines are on a — which juts out into —. The Black Hills are in —. Gold has been discovered there. Near the diggings is the town of —. Deadwood is on the border of —. Dakota, with its rich prairies, resembles the — States.

LESSON XXXII.

1. **Manufactures.**—In the Central and the North Central States less attention is paid to manufacturing than to tilling the soil. Yet many articles for home use are extensively manufactured.

2. Flouring-mills grind immense quantities of wheat. In this manufacture, ST. LOUIS surpasses every other city of the Union. MINNEAPOLIS, at the Falls of St. Anthony in the Mississippi River, is also noted for its flour.

3. Numerous saw-mills turn the logs of northern Michigan and Wisconsin into lumber. This is exported to points where timber is scarce.

4. Many furnaces are at work, separating the metals from their ores. There are large factories, which turn out the best agricultural implements in the world, furniture, machinery, etc.

5. **Pork-packing.**—Thousands of hogs are cut up every year. The fat is tried out into lard; the hams are cured, and other parts are salted, and barreled or smoked. This constitutes the business of pork-packing, for which the cities of CHICAGO and CINCINNATI are noted.

6. **Commerce** is one of the most important pursuits of this section. It has been the chief source of wealth to the three great cities, ST. LOUIS, CHICAGO, and CINCINNATI.

7. **St. Louis and Chicago** are the largest cities

west of the Alleghanies. They each contain more than half a million of people. St. Louis is connected with the east by the Ohio River, with the northwest by the Missouri, with the north and south by the Mississippi. Besides, it is a great railroad center. So it has become the market for vast regions teeming with rich products.

8. **Chicago** carries on a vast commerce by both lake and railroad. Its trade in grain, pork, lumber, and live-stock, is immense. Fifty years ago, there were only a few houses and an old fort where this magnificent city now stands.

9. **Cincinnati**, with its beautiful suburbs, stretches ten miles along the Ohio River. It is a busy commercial and manufacturing center. Fine steamboats are built there. A costly suspension-bridge spans the Ohio at Cincinnati.

10. **Louisville**.—Louis XVI., king of France, helped the Americans when they were fighting against Great Britain in the Revolutionary War. **LOUISVILLE** was named in his honor. It is a large commercial city, and one of the chief markets for tobacco-leaf.

11. **Lake-Ports**.—Many lake-ports besides Chicago carry on an active commerce. Chief among these is **CLEVELAND**, which is also extensively engaged in manufacturing iron and refining petroleum. **DETROIT** trades largely with Canada. **MILWAUKEE** is a famous wheat-market. **TOLEDO** has a fine harbor on the Maumee, near Lake Erie.

12. **Railroad Centers**.—Railroads, with which these states are threaded, have helped to build up large cities—markets and forwarding points for fertile regions around them.

Among the prominent railroad centers are **INDIANAPOLIS**, **KANSAS CITY**, **DAVENPORT**, and **ST. PAUL**. **OMAHA** is at the eastern end of lines of railroad extending to the Pacific Ocean, 1,800 miles in length.

St. Louis, Chicago, and Cincinnati, are the three great cities of the Central and North Central States.

THE ROCKY MOUNTAIN AND PACIFIC STATES AND TERRITORIES.

LESSON XXXIII.

From the North Central States we travel west. Turn to the map of the United States, p. 22.

At **Omaha**, the chief city of Nebraska, we may take the railroad for the Pacific. This follows the Platte River through Nebraska. It traverses southern Wyo'ming, Utah, Nevada (*nay-vah'dă*), and California, till it brings us to San Francisco, the chief city of the Pacific coast. It crosses two mountain-systems; what are they?

We thus pass through the most westerly section of the Union, consisting of the Rocky Mountain and Pacific States and Territories. It extends from the Dominion of Canada on the north, to Mexico on the south.



PORT AND TRADING-POST IN THE FAR WEST.

Map Questions.—Point toward the Rocky Mountains. Point to the Pacific Ocean. In what direction is the mouth of the Columbia River from New Orleans? In what direction are the Great Falls of the Missouri from Lake Superior? In what direction is Chicago from San Francisco?

The Rocky Mountain State is Colorado. Bound it.

The Pacific States are California, Or'gon, and Nevada. Which of these lie on the Pacific? Which lies near the Pacific, but does not touch it?

In going directly west from St. Louis, what states and territory would you pass through? What ocean would you reach?

QUESTIONS ON THE OPPOSITE MAP.

LESSON XXXIV.

Name the four states shown on this map. *Col., Cal., O., and N.* How many territories are shown on it?

Which of these territories lies on the Pacific?

What four territories border on Canada?

What two territories border on Mexico?

What territory is between Montana and Colorado?

What territory contains Great Salt Lake?

Name the seven territories on this map.

What two territories have you met with on other maps? In what direction is Dakota from Montana? Indian Territory from New Mexico?

What territory is separated from the rest of the United States? *Alaska.* Find Alaska on the map on p. 53. In what direction is it from the rest of the United States? From the Dominion of Canada? From San Francisco?

How many territories belong to the United States?

Name the ten territories of the United States.

In what state do four great rivers rise?

What is the capital of Colorado? What is its largest city? How is Denver situated?

Describe the situation of Leadville.

Which is the largest of the Pacific States?

Bound California. What mountains are in California? What islands are off the coast?

What is the capital of California? How is Sacramento situated?

What is the metropolis of California? Describe the situation of San Francisco.

What other towns are in California?

How is Cape Mendocino (*men-do-se'no*) situated?

LESSON XXXV.

What state besides California lies on the Pacific Ocean? Bound Oregon.

What rivers lie on the boundary of Oregon?

Name three branches of the Columbia.

Describe the Willam'ette River.

Name the capital of Oregon. Where is Salem?

What is the largest city of Oregon? Describe the situation of Portland.

What state is east of California? Bound Nevada.

What is the principal river of Nevada?

What mountains are in Nevada? What lakes?

What is the capital of Nevada? Describe the situation of Carson City. What mining city is the metropolis of Nevada? How is Virginia City situated?

Which is the most westerly of the territories?

What sound indents the coast of Washington?

Of what is Puget (*pu'jet*) Sound an arm?

What is a passage of water connecting two larger bodies called? *A Strait.*

How is the Strait of Juan de Fuca (*hoo-ahn' day foo'-kah*) situated? *The Strait of Juan de Fuca lies north-west of Washington Territory, and connects Puget Sound with the Pacific.* Describe all straits in this way.

What mountain-peaks are in Washington?

What kind of a mountain is Mount St. Helen's? *Mount St. Helen's is a VOLCANO, or burning mountain, which sometimes throws up melted stones, ashes, flames, and smoke. It is then said to have an eruption.*

What is the capital of Washington Territory? How is Olympia situated? What is the largest town?

How is Walla Walla (*wol'la wol'la*) situated?

What large island is north of Washington? What capital is on Vancouver Island? Of what is Victoria the capital? *B. C.* To what does British Columbia belong? *The Do. of C.*

In what direction is Idaho from British Columbia?

What is the capital of Idaho? How is Boise (*boy'-see*) City situated?

LESSON XXXVI.

What two territories lie east of Idaho?

Which of these is traversed by the Missouri?

What large branch of the Missouri traverses Montana (*mon-tah'nd*)? Describe the Yellowstone River.

What is the capital and largest town of Montana? How is Hel'ena situated?

In what state and in what territory is there a Virginia City?

What territory is west of Nebraska?

What lies in the northwest of Wyo'ming?

What peak is near the National Park?

What is the capital and largest town of Wyoming? How is Cheyenne (*shi-en*) situated?

In what territory is the Colorado River formed?

Bound Utah. What lakes are in Utah?

What is the capital and largest city of Utah? How is Salt Lake City situated?

Describe Salt Lake City. *Salt Lake City lies in a fertile valley, and is handsomely laid out with broad streets, and large gardens around the houses.*

What territory is south of Utah?

What large river forms part of the western boundary of Arizona? For what is the Colorado noted?

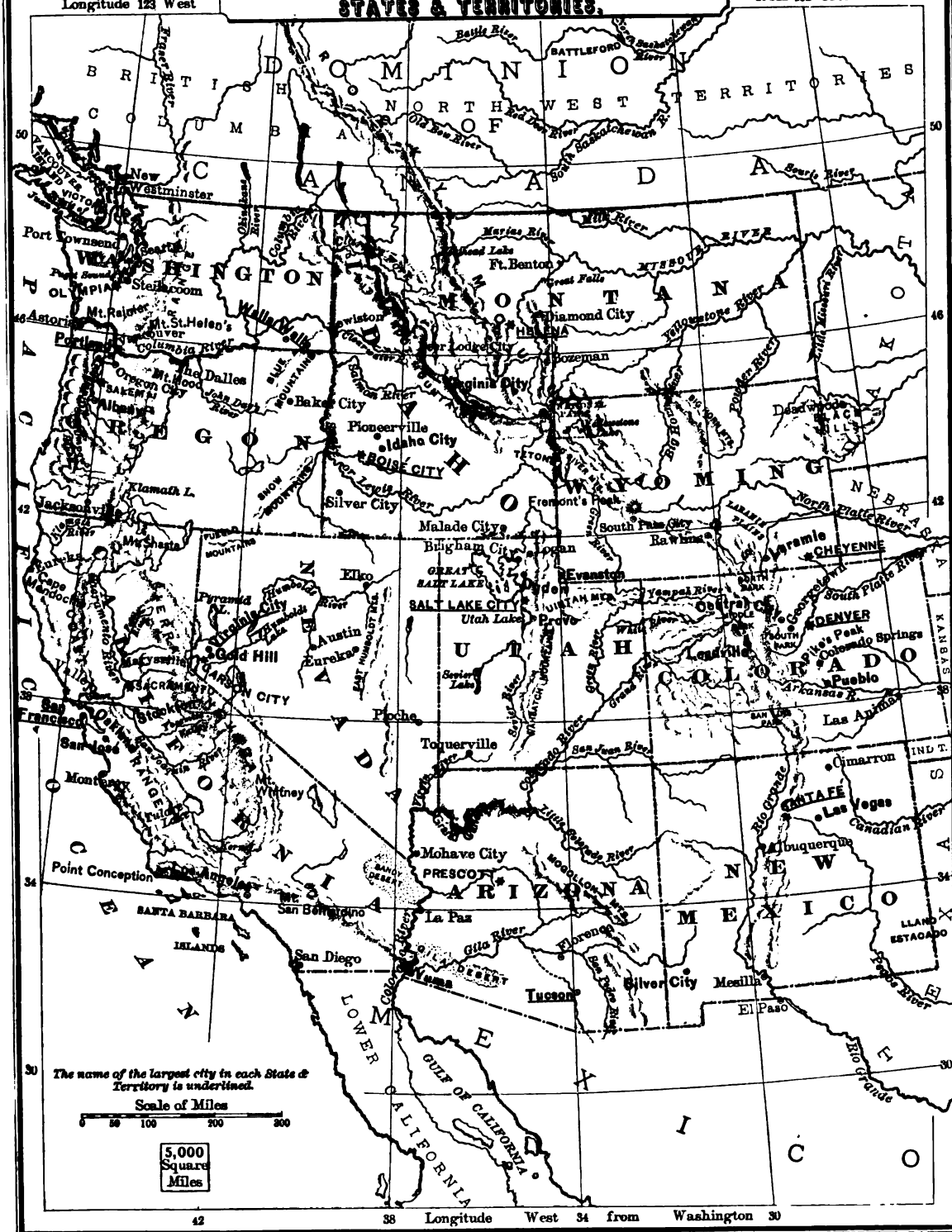
Describe the Gila (*he'lah*) River.

Name the capital of Arizona. Where is Prescott?

PACIFIC & ROCKY MOUNTAIN STATES & TERRITORIES.

Longitude 123 West

from 103 Greenwich



What territory is east of Arizona?

What large river traverses New Mexico?

Rio is the Spanish for *river*; *grande* is *great*. What does *Rio Grande* mean?

What is the capital and largest town of New Mexico?

How is Santa Fé (*fay*) situated?

Where is the Gila Desert?

Describe it. *It is so dry that nothing will grow there.*

What state contains a sandy desert?

In what state and territory is the Llano Estacado (*lyah'no estah-kah'do*)?

What do these words mean? *Staked plain*. It is so called from the yucca-stems, looking like stakes, that abound there.



THE YUCCA.

California ranks next to Texas in size.

San Francisco is the metropolis of the Pacific coast. The largest city in the territories is Salt Lake City.

Review.—Let each pupil make a Table of four columns, containing respectively the names of the Rocky Mountain and Pacific States and Territories (the states first), their capitals, largest cities, and largest rivers, as shown on p. 32. Recite as there suggested.

Map-drawing.—What state and what territory have perfectly regular outlines?

Draw an outline of Colorado on a scale of 40 miles to an inch. On this scale, how many inches will represent 80 miles? 200 miles? 280 miles? How many miles will $9\frac{1}{2}$ inches represent?

For the outline of Colorado draw an oblong, with a length from east to west representing 380 miles, and a breadth from north to south representing 280 miles. Insert the Rocky Mountains, Pike's Peak, and the Arkansas River. Locate Denver.

WRITTEN EXERCISE.—Complete the following: The largest city west of the Rocky Mountains is ——. The largest city of Oregon is ——. There is another Portland in ——. To go by water from San Francisco to Portland in Oregon, we should have to sail on the —— Ocean and the —— Rivers.

The Snake River is also called ——. It is a branch of the ——. The most important branches of the Missouri are the ——, the ——, and the —— River.

— territories are embraced in the United States. Alaska is in the extreme —— part. The four northern territories are ——. The three southern territories are ——. The central territories are —— and ——. The National Park is in ——. In the National Park is —— Lake, in which the —— River rises.

DESCRIPTIVE MATTER.

LESSON XXXVII.

1. **History.**—Some of these states and territories were made from the large tract bought from France. The rest, including California and Nevada, were laid off from territory acquired from Mexico. Mexico was settled by the Spanish, who named many places after the saints. *San* and *Santa* mean *saint* in the Spanish language. What cities and islands in California show by their names that the Spanish once lived there?

2. **Indians.**—You sometimes read in the newspapers of battles with the Indians. It is out here that they take place. Wild Indians still rove over parts of these territories, hunting the bison and other game. Difficulties arise between them and the whites, and these lead to wars.

3. Government has forts scattered throughout this section, to maintain order. To these the Indians often come, to get blankets and other things they need; see the picture on page 45.

4. Indian Territory, which was shown on the Map of the Southern States, also contains Indians; but many of these have settled down on farms and learned the peaceful arts.

5. **Wild animals,** like wild Indians, inhabit this part of our country. Great herds of bisons roam to and fro in search of pasturage. Rocky Mountain sheep are common—and deer, for which the cougar lies in wait near their drinking-places. The beaver and otter are trapped. The black bear prowls among the mountains; and the fiercer grizzly bear, dangerous to the hunter unless his aim is true.—The Columbia River teems with salmon.

6. **Size.**—All these states and territories are large. Washington Territory, which is the smallest, is twice as large as Maine. You will see this, if you compare the scale of this map with that of the map of New England on page 27.

7. **Surface.**—This is the most mountainous part of our country. The various ranges rise from a lofty plateau, to which there is a gradual ascent from the prairies and lowlands on the east. Mines are worked in Colorado at nearly twice the height of the White Mountains.

8. **Climate and Soil.**—The winds from the Atlantic are drained of their moisture on the eastern slope of the Rocky Mountains. The winds from the Pacific part with theirs on the Pacific Slope. So between the Rocky Mountains and the Sierra Nevada but little rain falls. The soil is mostly barren, except where the farmers *irrigate* their fields—that is, dig channels from the rivers and carry streams among their crops.

The valleys of California and Oregon are very fertile. The climate of the Pacific Slope is uniform and mild. Snow is rare in San Francisco.

9. **Great Salt Lake** is the largest lake in this section. Most lakes are fresh, but this one is so salt that fish can not live in it. You could bathe there with little danger, for the water is so heavy

with salt that it buoys up the body. The lake is seventy-five miles long, but shallow; it contains several large islands. Steamers ply on its waters. The surrounding country is desolate.

The Rocky Mountain and Pacific States and Territories are high, mountainous, for the most part thinly settled, and dry between the two great mountain-systems. They are all noted for their metallic treasures.



GIANT TREES AND STATE CAPITOL, CALIFORNIA.

LESSON XXXVIII.

1. **The National Park**, in Wyoming, set apart for the use of the people, is nearly three times as large as the whole State of Rhode Island. It is full of natural wonders—waterfalls, cañons, and geysers (*ghi'sers*), or springs that send up great streams of hot water many feet into the air.

2. **The Parks of Colorado** are a different kind of park. These are valleys formed of plateaus bounded by spurs of mountains. What parks do you find in Colorado on the map?

3. **Natural Curiosities of California.**—The Yosemite (*yo-sem'e-te*) Valley affords the grandest views. It is a vast chasm, extending eight miles between granite walls that rise straight up more than half a mile into the air. Several streams plunge into the valley, forming beautiful falls, one of which has a descent of 1,500 feet.

There are, besides, boiling mineral springs, mud volcanoes, and the biggest trees in the world, 2,000 years old. A man can ride on horseback seventy-five feet through the hollow trunk of one of them, as it lies on the ground.

4. **Occupations.**—Numbers have flocked to different parts of this section, to get out the precious metals. Many on the Pacific coast are engaged in tilling the soil. Others raise stock. California is one of the best countries in the world for sheep-raising; wool is among its chief exports.

5. In these newly-settled regions, manufactures are generally limited. But a great deal of lumber is made; the forests of the Sierra Nevada, Oregon, Washington, and the mountains of Colorado, furnish the very best timber.

6. Commerce is actively pursued on the Pacific coast. The miners need supplies, and this creates a large domestic commerce. San Francisco, owing to its traffic with the interior, its coast-trade, and its commerce with the rich countries across the Pacific, is the busiest seaport of its size in the world.

7. **Agricultural Products.**—Wheat and oats are the staples of Oregon.

California raises the best of wheat, and more barley than any other state. Its vegetables and fruits grow unusually large. In its southern districts figs and oranges are produced, and beautiful olive and almond trees yield abundantly. California wines are famous. The mulberry-tree flourishes, and silk-worms are raised on its leaves.

8. **The Precious Metals,** gold and silver, are found in many parts of this region. California was long the foremost state in their production; now Nevada is. Colorado ranks third. Utah and Arizona are especially rich in silver-ores.

9. Soon after California was acquired from Mexico, a man digging a mill-race noticed some sparkling particles in the sand. They turned out to be gold. The whole country was soon alive with diggers, seeking their fortunes. Gold was afterward found in various other places—on both sides of the Sierra, in the Rocky Mountains, the Black Hills, Oregon, and Washington Territory. Mining towns sprung up, sometimes in a few weeks. Hence the rapid growth of California and Colorado, and their cities; of Deadwood, Helena, Boisé City, the two Virginias, Eureka, Leadville, etc.

10. **Other Minerals.**—You have seen the backs of looking-glasses. They are covered with a white coat made from quicksilver, or mercury. This metal is not a solid like iron, but a liquid; it is also white, like silver. Hence its name—*quick*, or living, *silver*. California contains rich mines of this metal; also, of copper, iron, and coal.

Wyoming has vast coal-beds and valuable deposits of various metals.

11. **Cities.**—SAN FRANCISCO, “the Golden City,” is the great metropolis. PORTLAND is an important shipping-point for the flour and lumber of Oregon. DENVER is a busy center of trade for the rich mining regions of Colorado.

SACRAMENTO contains the finest building west of the Rocky Mountains—the Capitol of California (*see p. 49*). SANTA FÉ, founded by the Spanish, is, next to St. Augustine, the oldest city in the United States.

Nevada, California, Colorado, and Montana, are rich in both gold and silver; Utah and Arizona, especially in silver; Dakota, Idaho, and Oregon, in gold.

REVIEW OF THE UNITED STATES.

LESSON XXXIX.

Groups of States.—In what part of the United States is each situated?

1. THE NEW ENGLAND STATES—6.
2. THE MIDDLE ATLANTIC STATES—7.
3. THE SOUTHERN STATES—10.
4. THE CENTRAL STATES—3.
5. THE NORTH CENTRAL STATES—8.
6. THE ROCKY MOUNTAIN STATE—1.
7. THE PACIFIC STATES—3.

Territories.—In what part of the United States is each situated?

- | | |
|----------------------|----------------------------------|
| 1. INDIAN TERRITORY. | 6. WYOMING. |
| 2. DAKOTA. | 7. UTAH. |
| 3. MONTANA. | 8. NEW MEXICO. |
| 4. IDAHO. | 9. ARIZONA. |
| 5. WASHINGTON. | 10. ALASKA (<i>see p. 53</i>). |

District. How is it situated?

COLUMBIA.

Capital of the United States. How situated?

WASHINGTON.

Ten Largest Cities of the United States. New York has more than a million inhabitants. Brooklyn, St. Louis, and Chicago, rank about alike, with more than half a million each. Tell in what state each is; in what part of the state; on what water; if on a river, on which side.

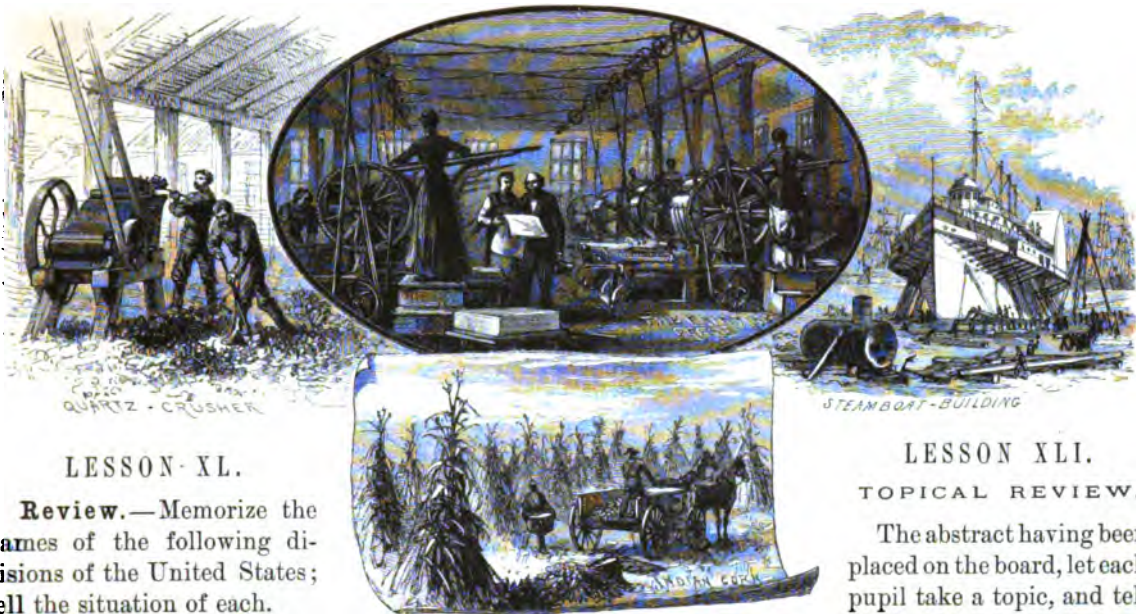
- | | |
|------------------|-------------------------------------|
| 1. NEW YORK. | 7. BALTIMORE, |
| 2. PHILADELPHIA. | (<i>left bank of Patuxent R.</i>) |
| 3. BROOKLYN. | 8. CINCINNATI. |
| 4. ST. LOUIS. | 9. SAN FRANCISCO, |
| 5. CHICAGO. | (<i>on San Francisco Bay</i>). |
| 6. BOSTON. | 10. NEW ORLEANS. |

WRITTEN EXERCISE.—*Complete the following:* The System of the Sierra Nevada includes the — Ranges. East of the Sierra is a plateau extending to the — Mountains.

The Rocky Mountain System embraces the — Mountains. It traverses the state of — and the territories of —. East of the Rocky Mountains are the Great Plains, gradually sloping toward the — River. East of the Mississippi Valley is the Appalachian System, embracing the — Mountains.

West of the Mississippi there are — states and — territories. — is the largest state in the Union, and — is the next largest. — is the smallest state, and — the next smallest.

The Great Falls of the Missouri are in — Territory. From these falls we could go by water to the Gulf of —. We should have to sail down the — and the — River. We should pass the cities of — on the right, and — on the left.



LESSON XL.

Review.—Memorize the names of the following divisions of the United States; tell the situation of each.

Islands.—In what water, off what coast?

MOUNT DESERT, MARTHA'S VINEYARD, FLORIDA KEYS,
NANTUCKET, LONG, SANTA BARBARA.

Capes.—Projects into what water, from what coast?

COD, HATTERAS, LOOKOUT, FEAR, SABLE, MENDOCINO.

Mountains.—In what state or states, and what part?

APPALACHIAN SYSTEM,	White,	Blue Ridge,
	Green,	Alleghanies,
	Adirondacks,	Cumberland,
ROCKY MOUNTAINS,	Catskills,	Mt. Mitchell.
	Bitter Root,	Fremont's Peak,
	Wind River,	Pike's Peak.
SIERRA NEVADA,	Coast Range,	Mt. Shasta,
	Cascade Range,	Mt. Hood,
	Mt. Whitney,	Mt. St. Helen's.

Bays, Gulfs, Sounds.—Arm of what, indents what coast?

PENOBSCOT BAY, MASSACHUSETTS BAY, NARRAGANSETT BAY,
LONG ISLAND SOUND, DELAWARE BAY, CHESAPEAKE BAY,
ALBEMARLE SOUND, PAMUNCO SOUND, GULF OF MEXICO, PUGET SOUND.

Lakes.—In, or on the borders of, what state?

SUPERIOR, HURON, ONTARIO, CHAMPLAIN,
MICHIGAN, ERIE, ST. CLAIR, GREAT SALT.

Rivers.—Rises where (or is how formed), flows in what direction, and into what?

MERRIMAC, CONNECTICUT, HUDSON, DELAWARE, SUSQUEHANNA,
POTOMAC, JAMES, SAVANNAH, ST. JOHN'S.

MISSISSIPPI, { Ohio, Arkansas,
 { Tennessee, Red.

MISSOURI, Yellowstone, Platte, Kansas.

RIO GRANDE. COLORADO. COLUMBIA.

LESSON XLI.

TOPICAL REVIEW.

The abstract having been placed on the board, let each pupil take a topic, and tell all that he knows about it.

THE UNITED STATES.

- I. NAME. Why so called?
- II. MEMBERS. Made up of what?
- III. THE STATES.
Names, by groups; capital and largest city of each.
- IV. THE TERRITORIES.
Names; capital and largest city of each.
- V. THE DISTRICT.
- VI. SIZE. 1. Length. 2. Breadth. 3. Square miles.
- VII. POPULATION.
- VIII. MOUNTAINS. 1. Systems. 2. Ranges. 3. Peaks.
- IX. SLOPES. 1. Atlantic. 2. Pacific.
- X. RIVERS.
1. Rivers flowing into the Atlantic.
2. The Mississippi.
 a. Eastern Branches. b. Western Branches.
3. Rivers flowing into the Pacific.
- XI. INDUSTRIAL PURSUITS.
- XII. AGRICULTURAL PRODUCTS; the section or states that take the lead in each.
1. Grass, oats, potatoes. 2. Wheat. 3. Corn and tobacco. 4. Cotton and Rice. 5. Sugar.
- XIII. COMMERCE. Chief commercial cities.
- XIV. MANUFACTURES.
1. Cotton. 2. Flour. 3. Iron. 4. Lumber.
- XV. MINERAL PRODUCTS.
1. Precious metals. 3. Coal. 5. Lead.
2. Iron. 4. Copper. 6. Quicksilver.
- XVI. GOVERNMENT; highest officer; the law-making body.
- XVII. HISTORY; of the whole country; of separate sections.

NORTH AMERICA.

LESSON XLII.

1. **Alaska.**—One territory, you remember, is detached from the rest of the United States. What is its name? Find Alaska on the opposite map.

In what direction is Alaska from the rest of the United States? What separates them? *The Do. of C.*

What peninsula is in Alaska? Into what does the peninsula of Alaska project?

Name the chief river of Alaska. Describe the Yu'kon River.

What ocean is north of Alaska? What ocean south? What strait west? Where is Behring (*be'ring*) Sea?

What mountain is on the boundary between Alaska and the Dominion of Canada?

What is the principal town in Alaska? In what direction is Sitka from Washington? Point toward Sitka.

How can we go from San Francisco to Sitka? What cape is in Alaska? Bound Alaska.

2. **A Republic.**—We have now visited the thirty-eight states, the ten territories, and the district, of the United States. These all form one country. The people choose the men who make and enforce the laws. A country in which the people have this right is called a *Republic*. **The United States is a Republic.**

3. **North America.**—We must now see something of other countries. Find them on the map, as named.

If we go north from the United States, we enter the DOMINION OF CANADA.

Sailing northeast from the Dominion of Canada, we come to two islands. They belong to the Danes, a people living across the Atlantic. Hence we call this part DA'NISH AMERICA.

Going south from the United States, across the Rio Grande, we enter MEXICO.

Southeast of Mexico is CENTRAL AMERICA.

These, with some islands on the coast, form one of the *Grand Divisions* of the earth, called NORTH AMERICA.

Bound North America. Bound the United States.

North America is made up of the United States, the Dominion of Canada, Danish America, Mexico, Central America, and some islands off the coast.

QUESTIONS ON THE OPPOSITE MAP.

LESSON XLIII.

In what part of North America is the Dominion of Canada? What ocean is north of Canada?

What waters separate Canada from Greenland?

What country is south of Canada? What lakes lie on the boundary between Canada and the United States?

Between what oceans on the east and west does Canada lie? Bound the Dominion of Canada.

What mountains extend from the United States into Canada? What large river of the United States rises in Canada?

Where is Baffin Bay? What strait connects Baffin Bay with the Atlantic Ocean?

Where is Hudson Bay? What strait connects Hudson Bay with the Atlantic?

Where is the Gulf of St. Lawrence?

What is Newfoundland (*nu'fund-land*)? Where is it?

In what part of the Dominion is British Columbia?

What islands are included in British Columbia?

Alexander Mackenzie was the first to explore what is now the northwestern part of Canada. What river is named after him?

Of what lakes is Mackenzie River the outlet?

Where is Lake Winnipeg? What river is its outlet?

What is the capital of the Dominion of Canada?

How is Ottawa situated? In what direction is Ottawa from Washington?

What two other cities in Canada? In what part of Canada are Montreal and Quebec? On what river?

Where is Labrador? The name *Labrador* means *tillable land*; but the country is so cold and rocky that nothing but potatoes and a few other hardy vegetables can be raised there.

Point toward Canada. Point toward Mexico.

What two peninsulas are in Mexico?

Describe the situation of the Gulf of California.

On what two countries does the Gulf of Mexico border? What rivers flow into it?

What does the word *sierra* mean?

Where is the Sierra Madre (*mah'dray*)?

Where is Cape St. Lucas. Bound Mexico.

What is the capital of Mexico? In what part of the country is the city of Mexico?

What is the chief seaport of Mexico?

On what water is Vera Cruz (*vay'rah kroos*)?

What bodies of water border on Central America?

Where are the West Indies? The Bermu'da Islands?

Which is the largest island of the West Indies?

Name the largest city of the West Indies.

In what part is North America narrowest?



MERIDIANS.—PARALLELS.—ZONES.*

LESSON XLIV.

1. **Lines crossing the Maps.**—You have no doubt noticed lines crossing the maps you have studied, and wondered what they are for. No such lines are drawn on the earth's surface, but we imagine them to be there, and represent them on maps.

The lines that run up and down are called **Meridians**. The numbers that denote them stand at the top. The lines that extend from right to left are called **Parallels**. The numbers that denote them are at the sides.

2. **Their Use.**—These lines are for the purpose of showing where places are. If a sailor discovers a new island away out in the ocean, how can he ever find it again unless he has some means of locating it? If he knows it is on meridian 107 West and parallel 20 North, he can easily go back to it.

3. Places that are on meridian 107 West are said to be in 107 degrees West *Longitude*. Places on parallel 20 North are said to be in 20 degrees North *Latitude*. Find the point on the map of North America that is in this latitude and longitude.

North America lies wholly in north latitude.

Where is Cape Farewell? What is its latitude? What mountain is in nearly the same latitude?

4. **Zones.**—In the margins of the map of North America you find the words *Torrid Zone*, *North Temperate Zone*. Zones are belts of the earth's surface in which the temperature is nearly the same throughout—hot, or moderate, or cold.

5. **The Torrid Zone.**—*Torrid* means *parched*, *hot*. The southern part of North America lies in the Torrid Zone. This zone, you will see, extends north to the line marked 23½ in the margin and called the Tropic of Cancer. What country does this tropic cross?

6. **The North Temperate Zone** lies north of the Tropic of Cancer. *Temperate* means *moderate*, and the climate of this zone is neither very hot nor very cold.

The North Temperate Zone, you will see, extends north to the dotted line marked 66½ in the margin and called the Arctic Circle. What countries does the Arctic Circle cross?

* These subjects are treated further on pp. 98, 99.

7. **The North Frigid Zone.**—North of the Arctic Circle is the North Frigid Zone. Find these words on the map. *Frigid* means *cold*. Many of the waters in this cold zone are frozen over during much of the year. Ships that go there are often frozen in; the sailors sometimes have to leave them in the ice, and hardly escape with their lives. There are no green fields; in most parts, no trees or bushes.

Of these three zones, which is the hottest? The coldest? Which is the moderate one? Which is farthest north? Farthest south? In what zone do you live? Point toward the Torrid Zone. Point toward the North Frigid Zone.

In what zone is Central America? In what zone is all of the United States except Alaska? In what zones is Alaska? Greenland? Iceland? Mexico? In what zone is most of the Dominion of Canada? The city of Washington?

What line separates the Torrid Zone from the North Temperate Zone? The North Frigid Zone from the North Temperate Zone? Which is farther south, the Arctic Circle or the Tropic of Cancer? Which is warmer, Mexico or the United States? Central America or British Columbia?

Alaska lies in the North Frigid and the North Temperate Zone. The rest of the United States is in the North Temperate Zone.

COLD COUNTRIES OF NORTH AMERICA.

LESSON XLV.



HUNTING THE WALRUS.

1. **The Cold Countries.**—Let us first visit the cold countries of the North. You will find many places named after bold sailors who have pushed

up among the drifting ice to explore these regions. Behring, a Dane in the service of Peter the Great, Czar of Russia, gave his name to the sea and strait that separate Alaska from Asia; he was wrecked, and died of hunger on a desolate island. In Hudson Bay, the same Henry Hudson who discovered the Hudson River was set adrift in an open boat by his mutinous crew: he was never heard of afterward.

2. **Alaska** is more than twice as large as all the New England and Middle Atlantic States together. The Yukon is one of the great rivers of the world. You can ascend it for 1,800 miles, but you will find no thriving cities or villages on its banks. There are several volcanoes in Alaska. Mount St. Elias, a peak of the Coast Range, is the highest mountain in North America.

3. In most parts of Alaska it is too cold to raise grain or potatoes. Fish and furs are the wealth of the country. Salmon and codfish are taken in immense numbers. You have seen the handsome seal-skin cloaks that ladies wear; many of these are obtained from the seals of Alaska.

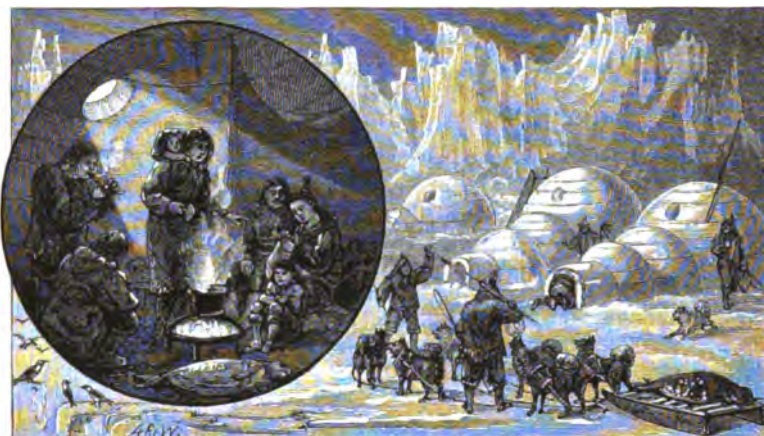
4. **Walrus-hunting** is carried on to some extent. The walrus, found in different parts of the Arctic regions, is nearly twice as long and heavy as a horse. Like the seal, it lives in the water, but comes up on the land and on the ice to rest.

The hunter then attacks it, for its tusks make good ivory, and its oil, skin, and flesh, are all valuable. But walruses generally go in herds, and they rally to defend one another and their young. They deal stout blows with their tusks; and unless the hunter has firearms, it sometimes goes hard with him and his boat.

5. **SITKA**, the chief town of Alaska, is a rainy place. It has two wet days for one that is clear.

6. **The Dominion of Canada** extends up into the North Frigid Zone. The coast is lined with cold and barren islands. Among these, many

have tried to find a route between the two great oceans; but one ship's company, however, has ever succeeded in making the entire passage, and they only after enduring many hardships.



ESQUIMAU LIFE.

7. **The Esquimaux** (*es'ke-mo*—*eaters of raw flesh*) are a peculiar people who inhabit the northern shores from Behring Strait to Greenland.

The Esquimaux live by fishing and hunting, and move from place to place wherever they can find seals and sea-birds.

They have fierce wolfish dogs, which they harness to sleds and drive rapidly over the ice with long whips. Their winter huts, partly underground, are covered with snow, and entered on all-fours through long, tunneled passages. The whole family cook, eat, and sleep, in one small, filthy room. Blubber, burned in a basin-like lamp with a wick of moss, serves as fuel and light. The above engraving shows the inside and the outside of an Esquimau hut. A party has just returned with one of their dog-teams, bringing a seal that they have killed. When food is plenty, the Esquimaux are great gluttons.

On the Esquimaux, consult Dr. Kane's "*Arctic Explorations*," vol. ii., pages 113, 132.

8. **Greenland** is an immense island. The coasts in the north abound in enormous glaciers, or solid seas of ice. No one has ever explored the interior. There are a few settlements in the south, and whalers visit the neighboring waters.

9. **Whales** are the largest of living creatures. Some of them grow to be a hundred feet long. They yield oil, whalebone, and spermaceti. Formerly many vessels were engaged in their capture, but of late whales have become scarce. Kerosene has to a great extent taken the place of whale-oil.

10. **Iceland** lies east of Greenland, and with Greenland forms Danish America. It looks like a small island on the map, but it is larger than the whole state of Virginia. Desolate swamps, glaciers, mountain-masses, and lava thrown up by volcanoes, cover much of the surface. There are no trees of any size; no roads, bridges, or carriages. The people travel on horseback.

11. **Volcanoes and Geysers**.—There are several burning mountains, which sometimes have terrible eruptions. Mount Hecla is the most famous. There are also wonderful geysers, which send up columns of boiling water a hundred feet high.

12. **The Icelanders** depend chiefly on their domestic animals. They export wool and woollen mittens, salted and dried fish, Iceland moss, and eider-down.

Eider-down consists of the soft feathers of eider-ducks, collected from their nests. The bird lines its nest with these feathers, and, when they are removed, will pick more from its breast and line it a second time. The nests are private property and are highly valued. There is a fine of thirty dollars for killing an eider-duck.

WRITTEN EXERCISE.—Complete the following: The Arctic Circle crosses —, the —, —, and —. Hence these countries are partly in the — Zone, and partly in the —.

The principal river of Alaska is the —. The longest river of the Dominion of Canada is the —. Cape — and Cape — project into the Arctic Ocean. Between the Arctic Ocean and Baffin Bay lie many islands belonging to —. The highest mountain of North America is —.

Alaska is valuable for its —; Iceland, for its —.

THE DOMINION OF CANADA.

LESSON XLVI.

1. **Features of Different Sections**.—The northern part of the Dominion of Canada, bordering on the Arctic waters and occupied only by scattered tribes of Esquimaux, is cold, barren, and unimportant. But, as we go south, we enter regions valuable for their martens, minks, beavers, and other fur-bearing animals. Nearer still to the United States we come to forests of excellent timber, to thriving farms and flourishing villages. In the southeastern part are large cities, connected by railroads and actively engaged in commerce and manufactures.

2. **Political Condition**.—Canada did not join in the American Revolution when the other British colonies declared their independence. It remained under the mother-country, and is still subject to Great Britain. Hence this part of America is sometimes called British America, and the provinces of the Dominion are known as the British Provinces.

3. **How made up**.—The Dominion of Canada is nearly as large as the United States. It contains seven provinces, besides extensive territories out of which other provinces will some day be made. British Columbia and Manitoba (*man-e-to'ba*), which are shown on the map of North America, are provinces of Canada; in what part of the Dominion are they?

4. **The five Southeastern Provinces**.—Ontario, Quebec, New Brunswick, No'va Sco'tia, and Prince Edward Island—are shown in the map on the opposite page. They extend from the Albany River on the northwest, to the United States, the Atlantic, and the Gulf of St. Lawrence.

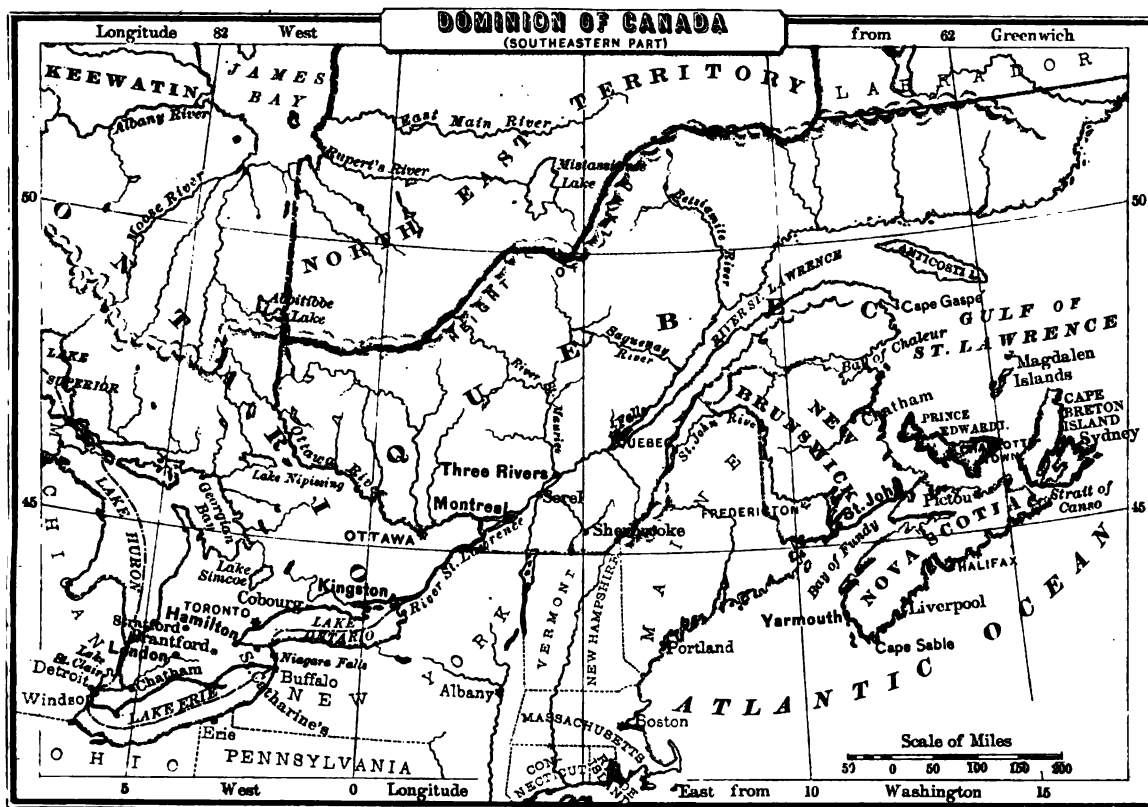
5. **Government**.—Each of the seven provinces has its own Legislature, or law-making body, and its own capital. The Dominion has a Parliament, which regulates its affairs as a whole, and in which each province is represented. The Governor-General is appointed by the British crown. The capital of the Dominion of Canada is OTTAWA.

To what, in the United States, do the Canadian provinces correspond? To what body does the Parliament correspond? To what officer does the Governor-General correspond?

Map Questions.—Which of the Canadian provinces borders on the Great Lakes? Which is traversed by the River St. Lawrence? Which border on the New England States? Which shares with New York in the Falls of Niagara? What river in part separates Ontario from Quebec? Bound Quebec.

To what river does Ontario extend on the north? What is the principal river of New Brunswick? Bound New Brunswick. What is the chief seaport of New Brunswick? Near what bay is St. John? At the mouth of what river? Bound Nova Scotia. What city is its capital and chief seaport?

The Dominion of Canada is part of the British Empire. It is made up of seven provinces and extensive territories. Its capital is Ottawa. Its largest city is Montreal. Its chief seaports are St. John and Halifax.



LESSON XLVII.

Into what does the Albany River flow? Of what is James Bay an arm? *Of Hudson Bay.*

What territory is east of James Bay?

What district is north of the province of Ontario?

How many capitals are in Ontario?

Of what is Ot'tawa the capital? Of what is Toronto the capital? How is Ottawa situated?

How is Toronto situated?

Name two other important places on Lake Ontario.

What river is the outlet of the Great Lakes?

From what state does the St. Lawrence River separate Ontario? From what states does Lake Erie separate it? What city of Michigan is opposite the southern part of Ontario?

Where is the Height of Land?

Into what do the rivers north of the Height of Land flow? Into what do the rivers south of this watershed flow?

What is the capital of the Province of Quebec?

How is the city of Quebec situated?

How is Montreal situated? Fredericton? Of what province is Fredericton the capital?

How is Halifax situated? Of what is it the capital?

How is Prince Edward Island situated?

What is the capital and largest town of Prince Edward Island?

What island is east of Prince Edward Island?

In what province is Cape Breton (*brit'un*) Island included? *In Nova Scotia.*

What strait separates Cape Breton from Nova Scotia?

What cape is in Nova Scotia? Where have you found another Cape Sable?

Where is the Bay of Fundy? The Gulf of St. Lawrence? Anticosti (*an-te-kos'te*) Island?

What river would you sail down, from Lake Ontario to the Gulf of St. Lawrence? What cities would you pass?

On what waters could you sail from Montreal to St. John? From Toronto to Ottawa?

Which of the provinces is a peninsula?

Which of the provinces is an island?

In what direction is Quebec from Ottawa? Toronto from Ottawa? Montreal from St. John? Halifax from Charlottetown? Ottawa from the capital of the United States?

In what part of Canada are the most cities and villages? What is the reason of this?

Mention two branches of the St. Lawrence. *O. and S.*

For what is the Saguenay (*sag-e-nay*) River noted? *For its grand scenery, which attracts many tourists.*

DESCRIPTIVE MATTER.

LESSON XLVIII.

1. **Surface.—Soil.**—The southeastern Canadian provinces are level. Good crops of grain and potatoes are raised, and excellent pasturage is found. South and west of Lake Winnipeg are fertile prairies and the best of wheat-land. British Columbia is mountainous, but adapted to stock-raising.

2. **The Climate** is severe in winter. Snow falls abundantly, but is very useful. It protects the wheat sown in autumn. It makes traveling easy. It helps the farmer in bringing his produce to market, and the lumberman in drawing out his logs. The summers are hot, and ripen the crops rapidly.

3. **The People.**—If you should ask the inhabitants where they came from, most of them would say that they or their forefathers came from England, Ireland, or Scotland. There are many of French descent; Canada once belonged to France.

4. Not a few Indians, also, live in Canada. Some have learned to cultivate farms. Others rove about where they can hunt and trap to the best advantage. They exchange their furs with white traders for firearms, blankets, knives, tobacco, etc. None of the Canadian Indians are so troublesome as the Indians of the United States.

5. **Minerals.**—Coal is wanting in Quebec, Ontario, and Prince Edward Island, but is found

in the other provinces. Silver-ore is obtained near Lake Superior, and copper on the Mackenzie River. Gold deposits have attracted miners to British Columbia. When the Canadians have finished their great railroad from Lake Superior to the Pacific, rich mineral treasures will soon be brought to light.

6. **Lumbering** is one of the principal occupations. A great raft of logs, such as is often met with on the St. Lawrence River, is a striking sight. With its rough shanties, its blazing fires, its sails spread to the wind, its holiday flags, and its busy crew piloting it along, it looks almost like a floating village.

7. **The Fisheries** are an important interest. The salmon of British Columbia, and the cod, mackerel, and herring, of the eastern coast, keep many persons employed in catching and salting them, and are among the leading exports of the Dominion.

8. **Furs** are another valuable product of Canada. Thousands of hunters and trappers, including Indians, are engaged in the capture of fur-bearing animals, such as you see grouped in the engraving below.

As the hunter has to visit his traps scattered through the wilderness for many miles, in the depth of the northern winter, he has not a very easy life. Sometimes he meets a bear or hungry wolves; and often the crafty wolverene makes the rounds of his traps before him, and steals away the animals that have been caught.

The Hudson Bay Company, which has long had control of the fur-trade in this region, has a hundred and fifty posts in different parts of the Dominion. A post consists of a storehouse and a few dwellings surrounded by palisades; it is generally erected on a river, so as to be easily reached. The skins are brought in by the trappers to the various posts, from which they are collected, and sent principally to London, the chief fur-market of the world.

Lumber, wheat and flour, dairy products, salted fish, and furs, are the leading exports of the Dominion of Canada.



SABLE.

SILVER FOX.

MINK.

OTTER.

ARCTIC FOX.

ERMINE.



THE TRAPPER.

LESSON XLIX.

1. **Chief Cities of Canada.**—(*Describe the situation of each.*) OTTAWA, the capital, is noted for its handsome government buildings.

2. MONTREAL is the first city of Canada in size and extent of commerce.



NEW CATHEDRAL, MONTREAL (IN COURSE OF ERECTION).

3. QUEBEC, the capital of the province of Quebec, is a quaint old city. It ranks second in population and commercial importance, and is one of the greatest lumber-markets in America.

The citadel of Quebec is on the heights above the lower city, and is strongly fortified. Here, more than a hundred years ago, occurred the famous battle between the English general, Wolfe, and the French general, Montcalm (*mont-kalm'*), which cost each his life.

The French, regarding the heights on which their citadel was perched as secure, had left them but slightly guarded. Wolfe, repulsed in other quarters and almost in despair, at length determined to attempt a surprise. One dark night he silently landed his army at the base of the steep bluff that rose from the river's edge, and at dawn it was drawn up in battle array on the top. In the conflict that followed, the English were victorious, and since then Canada has belonged to Great Britain.—Consult Bryant's "*Popular History of the United States*," vol. iii., p. 304.

4. TORONTO, the capital of Ontario, noted for its university, is the third city of the Dominion.

5. HALIFAX is the capital and largest city of Nova Scotia. ST. JOHN is the metropolis of New Brunswick. Both have excellent harbors, and carry on an extensive foreign and coasting trade.

6. **Newfoundland.**—You have seen *Newfoundland* dogs, and have read about their saving persons from drowning. They get their name from an island that we found on the map of North America.

Newfoundland is larger than Ohio. It is not part of Canada, but is a distinct British colony. Labrador, a barren region on the mainland near by, is included in the same government.

7. The fish that frequent their coasts are the wealth of Newfoundland and Labrador. When Cab'ot first visited the Banks of Newfoundland, six years after Columbus discovered America, he reported meeting "such multitudes of big fishes that they did sometimes stop the ship". This is a hard story to believe; but certain it is that these banks have teemed with codfish ever since.

REVIEW.—Name the five southeastern Provinces of Canada, with the capital and largest town of each.

Name the six principal cities of Canada.

Memorize the names of the following natural divisions in connection with Canada, and describe the situation of each:—

Islands.—PRINCE EDWARD, CAPE BRETON.

Bays.—JAMES, GEORGIAN, FUNDY.

Gulf.—ST. LAWRENCE.

Rivers.—ST. LAWRENCE, OTTAWA, SAGUENAY, ST. JOHN.

MEXICO AND CENTRAL AMERICA.

LESSON L.

1. **The Hot Countries.**—We have been up in the cold North. We shall now take a trip south, to the hot countries of North America.

2. **Mexico.**—Crossing the Rio Grande, we first enter Mexico. We soon find that we are in a strange land. We traverse high sandy plains covered with the prickly pear, a kind of cactus, which has no leaves, but sends out flattened thorny joints one from another. Elsewhere luscious fruits abound. In the lowlands we meet with the cocoa-palm, mahogany, and many other trees that are new to us. The forests are gay with bright-colored parrots and humming-birds.

The country houses are built of a mixture of mud and gravel dried in the sun, and, on account of the frequent earthquakes, are only one story high. The Indians of the mountain districts

are of a different race from ourselves. The whites, sprung mostly from Spaniards, speak the Spanish language. The ladies smoke cigarettes. Goods are carried on the backs of mules. Wild horses roam over the plains. Here and there a *ranch* (stock-farm) meets the view, with its big *corral*, or inclosure, full of cattle.

Map Questions.—(See *Map of North America*, p. 53.) In what direction is Mexico from New England? From Alaska?

On what waters would you sail in going from Vera Cruz to New York? In going from San Francisco to Cape St. Lucas?

What two peninsulas partly inclose the Gulf of Mexico? In what direction is Yucatan from Florida? In what zone is Yucatan? In what zone is Florida? In what zones is the Gulf of Mexico? In what zone is the greater part of the Gulf of Mexico?

Using the scale of miles, find how long Mexico is from northwest to southeast. Find its greatest breadth from east to west. Draw the outline of Mexico as nearly as you can on the blackboard. Locate the capital and Vera Cruz.

3. **Size.—Surface.**—Mexico is about four times as large as California. It is mostly a plateau, traversed by mountain-ranges. A line of volcanoes, embracing two of the loftiest peaks in North America, crosses the country. The coasts are low and unhealthy.

4. **Productions.**—The products of the soil are various; the hot lowlands yield those of the Torrid Zone, the higher grounds those of temperate regions. Sugar-cane, cotton, coffee, tobacco, indigo, and the caca'o, from the beans of which chocolate is made, grow luxuriantly. Corn is the principal grain; in some sections four crops are harvested in a year.



THE COCHINEAL CACTUS.

5. **Cochineal,** which yields a rich crimson dye, is a valuable export. This is an insect that lives on a kind of cactus cultivated in plantations for its support. The insects are picked off with a blunt knife and dried.

6. **Pulque** (*pull'kay*) is a favorite drink in Mexico. It is the fermented juice of the American al'oe, which is cultivated in Mexico and Central America for the sake of producing this wine. A single plant, when ready to flower, will yield two gallons of juice a day for several months. The aloe, and Mexicans engaged in making pulque, are shown in the engraving on p. 62. A kind of brandy is made by distilling pulque.

7. **Minerals.**—Mexico is a storehouse of mineral treasures. Its silver-mines were once the richest in the world, and still produce largely. Gold and quicksilver, copper and tin, and the pearls of Lower California, add to its wealth.

8. **Government.**—Like the United States, Mexico is made up of different states joined in one republic. Civil wars have been frequent.

9. **Chief Cities.**—MEXICO, the capital, is about as large as New Orleans. It stands on higher ground than the highest peak east of the Mississippi. Throughout the year, fruits and flowers in wonderful variety make its markets and streets attractive.

VERA CRUZ is the chief seaport.

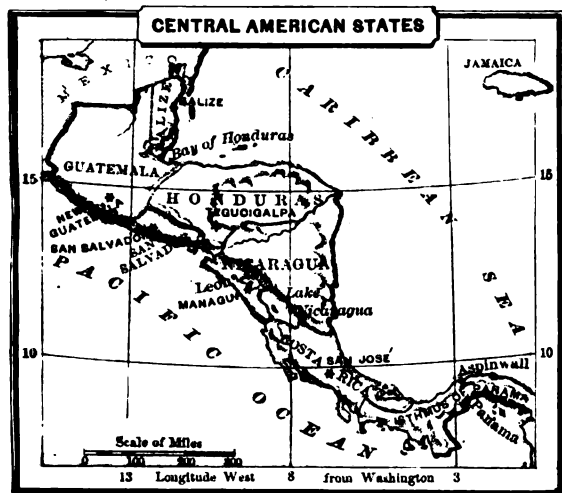
Vera Cruz was founded by the Spanish leader Cortez, who landed there in 1519. With about six hundred men he undertook to conquer the great empire of the Aztecs, who then ruled Mexico, with its millions of souls. He succeeded within three years, after a terrible struggle. The Aztecs had never seen a horse or a gun. Horse and rider they looked on as one animal, and the discharges of the Spaniards' firearms as the thunder of the gods. From the time of Cortez Mexico belonged to Spain, till about sixty years ago, when the people freed themselves from their Spanish rulers.

The Republic of Mexico has the city of Mexico for its capital. Vera Cruz is its largest seaport. Corn is its staple grain. Silver is the chief of its many mineral treasures. The prickly pear is a national emblem.

WRITTEN EXERCISE.—Complete the following: To go by land from the Dominion of Canada to Mexico, we should have to cross —. To go by water on the west, we should have to sail on the —. To go by water on the east, we should have to sail on the — and —.

The broadest part of Mexico is in the —. The —, which separates Mexico from the United States, rises in the — Mountains. So do the streams that form the — River, which empties into the Gulf of —. The insect called — is a valuable product of Mexico; it is used for —.

LESSON LI.



1. **Central America.**—Crossing the southeastern boundary of Mexico, we enter Central America. Find it on the map of North America, p. 53. In what direction is it from Washington? From San Francisco? Point toward Central America. In what zone is it?

2. Central America is shown on a larger scale in the map above. Like Mexico, it was early settled by Spaniards and for many years belonged to Spain. Before studying the map, it will be well to learn how to spell and pronounce some of the proper names.

Belize, <i>bā-leez'.</i>	Panama, <i>pan-ā-mah'.</i>
Guatemala, <i>gwah-tay-mah'lah.</i>	Caribbean, <i>kar-ib-be'ān.</i>
Honduras, <i>hon-doo'rās.</i>	Tegucigalpa, <i>tay-goo-se-</i>
San Salvador, <i>sahn sah'l-vā-dor'.</i>	Leon, <i>le'on.</i> [<i>gahl'pah.</i>]
Nicaragua, <i>nik-ā-rah'gwah.</i>	Managua, <i>mah-nah'gwah.</i>
Costa Rica, <i>kos'tah re'kah.</i>	San José, <i>sahn ho-say'.</i>

3. **Map Questions.**—Which of the Central American countries extends farthest north? Which extends farthest south? Farthest east? Farthest west?

Which border on the Pacific? Which border on the Caribbean Sea? Which border on Mexico?

Which is the largest? Which is the smallest?

Name the capital of each Central American country.

In what direction is New Guatemala from San Salvador? Managua from Tegucigalpa? Balize from San José? Describe the Bay of Honduras.

How is Lake Nicaragua situated? Into what sea does its outlet empty?

4. **How made up.—Surface.**—Central America consists of the British colony of Balize and five republics; name these. It is mountainous, and contains several volcanoes.

5. **Earthquakes** are frequent. A terrible earthquake destroyed Guatemala, the former capital of Guatemala. Eight times has the city of San Salvador suffered from disastrous shocks.

6. **Products, etc.**—The mahogany used for furniture is obtained with great labor and risk of health from the swampy coast-forests of Honduras and Balize. Indigo and sarsaparilla are also valuable products of Central America. The soil, though rudely cultivated, yields corn, rice, sugar-cane, cotton, tobacco, and coffee, in abundance. Commerce and manufactures are neglected.

7. **The West Indies.**—On the map of North America you will find some islands called the West Indies. How are they situated? Learn from the map the names of the four largest West India Islands.

8. Cuba and Porto Rico (*por'to re'ko*) belong to Spain. Jamaica is a British colony. Hayti (*ha'te*) is divided between two republics of blacks. These islands are the great sugar-cane region of the world. Their tobacco and tropical fruits (oranges, lemons, pineapples, bananas, etc.) are also famous.

New Guatemala is the finest city of Central America. Havana, noted for its sugar and cigars, is the metropolis of the West Indies, and a great commercial city.



PUBLIC SQUARE IN HAVANA—EVENING.



On the left is a picture of one of the large rafts often seen on Canadian rivers. On the right we have a Mexican scene; the vegetation, the buildings, and the dress of the natives, are quite different from ours. In the center is a winter view on the Pacific Railroad. The trains, crossing high mountain-ranges, sometimes encounter violent snow-storms, and snow-plows can hardly be forced through the drifts by the most powerful locomotives.

REVIEW OF NORTH AMERICA.

LESSON LII.

Review.—Memorize the names of the following divisions, etc., of North America :—

Countries.—In what part of North America is each?

DANISH AMERICA.

Greenland.

Iceland.

DOMINION OF CANADA.

British Columbia.

Manitoba.

Ontario.

Quebec.

New Brunswick.

Nova Scotia.

Prince Edward Island.

NEWFOUNDLAND.

Labrador.

THE UNITED STATES.

Alaska.

MEXICO.

Yucatan.

CENTRAL AMERICA.

Belize.

Guatemala.

Honduras.

San Salvador.

Nicaragua.

Costa Rica.

THE WEST INDIES.

The Bahama Islands.

Bound
each.

Islands.—In what water, off what coast?

BERMUDA, CUBA, VANCOUVER, QUEEN CHARLOTTE.

Capes.—Projects into what water, from what coast?

BARROW, BATHURST, FAREWELL, COD, HATTERAS, SABLE, ST. LUCAS, MENDOCINO.

Mountain-Ranges.—In what part of North America? Trav-
erses what country, and in what direction?

APPALACHIAN, ROCKY, SIERRA MADRE, SIERRA NEVADA.

Bays and Gulfs.—Arm of what, indents what coast?

BAFFIN BAY, HUDSON BAY, GULF OF ST. LAWRENCE, BAY OF FUNDY, GULF OF MEXICO, BAY OF HONDURAS, GULF OF CALIFORNIA.

Straits.—Connects what waters, separates what bodies of land?

BEHRING, DAVIS, HUDSON.

Rivers.—Describe each.

YUKON, MACKENZIE, ST. LAWRENCE, MISSISSIPPI, MISSOURI.

RIO GRANDE, COLORADO, COLUMBIA.

Cities and Towns.—Describe the situation of each.

SITKA, OTTAWA, MONTREAL, QUEBEC, WASHINGTON, NEW YORK, MEXICO, VERA CRUZ, BALIZE, NEW GUATEMALA, TEGUCIGALPA, SAN SALVADOR, MANAGUA, SAN JOSÉ, HAVANA.

TOPICAL REVIEW.—Let each pupil take one of the following topics, and without being questioned tell what he knows about it :—

Zones. — Alaska. — The Esquimaux. — Greenland. — Iceland. — The Indians of Canada and the United States. — Furs and Trapping. — Quebec. — The Fisheries of Canada and Newfoundland. — Mexico. — Cochineal. — Pulque. — The Conquest of Mexico by Spain. — Central America. — The West Indies. — The Government of the United States. — The Government of Canada. — The Government of Mexico. — The Natural Curiosities of North America (Falls of Niagara, Mammoth Cave, etc.).

SOUTH AMERICA.

LESSON LIII.

1. **South America.**—Looking at the map of North America, p. 53, you may wonder that Central America, lying so far south, is called *Central*. But really it is central, for America extends south of it more than four thousand miles. The part to the south is called **SOUTH AMERICA**. It forms a new Grand Division, which we are now going to visit.

2. **Isthmus of Panama.**—North and South America are connected, as you see, by a narrow strip of land. A neck like this, connecting two larger bodies of land, is called an Isthmus. This isthmus is known as the Isthmus of Panama.

3. **Proposed Ship-Canal.**—Turn now to p. 65, and you will see South America and the isthmus which joins it to North America. A ship sailing from a port in the eastern part of the United States and bound for the Pacific would save thousands of miles, if it could reach that ocean without going around South America. To enable it to do so, it is proposed to cut a ship-canal through the Isthmus of Panama.

4. **The Western Continent.**—North and South America together form what is called a Continent—one of the two largest divisions of land in the world. Each continent is surrounded by water, and is really a very large island. North and South America form the **WESTERN CONTINENT**.

5. **The Torrid Zone.**—Central America is in the Torrid Zone. Looking at the margin of the map of South America, we find that the Torrid Zone extends to the dotted line marked $23\frac{1}{2}$ and called the Tropic of Capricorn.

6. Midway between the tropics is a black line marked 0 in the margin and called the Equator.

The Torrid Zone, then, is bounded by the two tropics, and traversed midway by the Equator.

7. **The South Temperate Zone.**—In North America we found that it grows colder as we go north. As soon as we pass the Equator, it becomes cooler as we go south. South of the Tropic of Capricorn we enter the South Temperate Zone. If we

keep on to the south, we shall come to the South Frigid Zone, with glaciers and icebergs, seals and whales, like those of the North Frigid.

In the South Temperate Zone the season is the opposite of ours; it is winter when we have summer, spring when we have autumn, etc.

(Refer to map, p. 65.) In what zone is the northern part of South America? The southern part? The greater part? What part of South America is hottest? What part is coldest? Which is warmer, Brazil or the Dominion of Canada?

Places south of the Equator are said to be in *South* latitude. What three countries does parallel 10 South cross? What parallel crosses the southern part of Peru?

Meridian 77 West runs near Lima (*le'mah*) in Peru. This is the meridian on which Washington stands; Lima, then, is in about the same longitude as what city?

Meridians run north and south. In what direction is Lima from Washington? What meridian crosses eastern Brazil?

8. **Proper Names.**—The Spanish and Portuguese first settled South America. They have left there some names difficult to pronounce. Learn to spell and pronounce the following:—

Aconcagua, <i>ah-kon-kah'gwah</i> .	Chimborazo, <i>chim-bo-rah'zo</i> .
Argentina, <i>ar'jen-tine</i> .	Cotopaxi, <i>ko-to-pax'e</i> .
Asuncion, <i>ah-soon-se-own'</i> .	Cuzco, <i>koos'ko</i> .
Bahia, <i>bah'e'ah</i> .	Ecuador, <i>ek-wah-dor'</i> .
Bogota, <i>bo-go-tah'</i> .	Gallinas, <i>gal-le'näs</i> .
Buenos Ayres, <i>bo'nus ay'ris</i> .	Guayaquil, <i>gwi-ah-keel'</i> .
Callao, <i>kahl-lah'o</i> .	Guiana, <i>ghe-ah'nä</i> .
Cayenne, <i>ki-en'</i> .	La Paz, <i>lah pahs</i> .
Chili, <i>chil'le</i> .	Madeira, <i>mä-de'rä</i> .

North and South America, connected by the Isthmus of Panama, form the Western Continent.

South America lies in the Torrid and the South Temperate Zone.

LESSON LIV.

Proper Names.—Learn to spell and pronounce,

Maracaybo, <i>mah-rah-ki'bo</i> .	Santiago, <i>sahn-te-ah'go</i> .
Paraguay, <i>pah-rah-gway'</i> .	St. Roque, <i>saint roke</i> .
Parana, <i>pah-rah-nah'</i> . [ko.	Sucre, <i>soo'kray</i> .
Pernambuco, <i>pehr-nahm-boo'</i> .	Titicaca, <i>te-te-kah'kah</i> .
Potosi, <i>po-to-se'</i> .	Uruguay, <i>u-roo-gway'</i> .
Quito, <i>ke'to</i> .	Valparaiso, <i>vahl-pah-ri'so</i> .
Rio Janeiro, <i>ri'o jä-ne'ro</i> .	Venezuela, <i>ven-e-zwe'lä</i> .
Rio de la Plata, <i>re'o day lah</i> [plah'tah.	Tierra del Fuego, <i>te-eh'r'rah del</i> [fway'go.

QUESTIONS ON THE OPPOSITE MAP.

Bound South America. In what country is the Isthmus of Panama? What two seaports are on the Isthmus of Panama?

Bound the United States of Colombia.

What is the capital of the United States of Colombia? What is its chief river?

What two countries lie wholly north of the Equator? Bound Venezuela. What is its capital?

What lake is in Venezuela? With what sea is Lake Maracaybo connected?

What is the chief river of Venezuela? What island is off the coast of Venezuela?

How is Guiana situated? Name the capitals of its three divisions. How are these places situated?

Name the largest country of South America.

Bound Brazil. What is the capital of Brazil? How is Rio Janeiro situated?

What is the largest river of Brazil?

Describe the Amazon River. What is the largest branch of the Amazon?

Where is the diamond district of Brazil?

Name a large seaport of Brazil.

In what zones is Brazil? What part of Brazil is hottest? What part is most mountainous?

Name the smallest country of South America.

Bound Uruguay. What is the capital of Uruguay? How is Montevideo situated?

Where is the Rio de la Plata? What river flows into it? What is the chief branch of the Parana?

From what country does the Rio de la Plata separate Uruguay?

Bound the Argentine Republic. In what zones is the Argentine Republic?

What rivers separate the Argentine Republic from Paraguay?

What strait is south of Patagonia? What waters does the Strait of Magellan connect? What lands does it separate?

What islands lie west of Chili? In what ocean?

What is the chief seaport of Chili?

How is Valparaiso situated?

What countries are crossed by the Tropic of Capricorn? Bound Bolivia.

What is the capital of Bolivia? How is Sucre situated? Name two other places in Bolivia.

What lake is on the boundary between Bolivia and Peru? Bound Peru.

What is the capital of Peru? What other inland city is in Peru? What river rises in Peru?

Bound Ecuador. What is the capital of Ecuador?

What is the latitude of Quito?

What peaks of the Andes are in Ecuador?

What country of South America has no sea-coast?

Bound Paraguay. What is the capital of Paraguay?

How is Asuncion situated?

Name the four capes at the north, east, south, and west of South America. In what country, and in what zone, is each?

Which countries of South America are level?

What countries are traversed by the Andes? By the Amazon River? By the Parana River?

Which of the capitals of South America is farthest north? Farthest south? Farthest east? Farthest west?

Which of the capitals are in the Torrid Zone? Which are in the South Temperate Zone?

Which countries of South America border on the Caribbean Sea? Which border on the Atlantic Ocean? Which border on the Pacific?

Which countries are crossed by the Equator?

What island belongs to Brazil?

In what direction is Buenos Ayres from Rio Janeiro? Quito from Rio Janeiro?

Point toward Cape Horn.

On what coast is the Gulf of Guayaquil? The Bay of Panama? The Bay of All Saints?

In sailing from Aspinwall to Panama, on what waters would you go? In what other way could you go? *By railroad, across the Isthmus.*

What port is on the Bay of All Saints? On what waters could you sail from Asuncion to Bahia?

Name two South American ports on the Pacific. Name two on arms of the Pacific.

Name two cities on the Rio de la Plata.

What is about the latitude of Rio Janeiro?

Applying the scale of miles, find the greatest length of South America from north to south. Find its greatest breadth, from east to west.

Draw as nearly as you can, by copying from the map, the outline of South America. Locate the Andes, the Amazon River, and Rio Janeiro.

LESSON LV.

What is Tierra del Fuego? How is it situated?

What islands are east of southern Patagonia?

What part of the Argentine Republic is mountainous?

What is the capital of the Argentine Republic?

How is Buenos Ayres situated?

What country is west of the Argentine Republic?

Bound Chili. What is the capital of Chili?

How is Santiago situated?

What mountain in Chili? Of what chain is it a peak?



DESCRIPTIVE MATTER.

LESSON LVI.

1. **Surface.**—The western part of South America is mountainous. The rest, except portions of northern and eastern Brazil, is level. The central part, from Venezuela to Patagonia, consists mainly of low plains.

2. **The Andes** are the chief mountains of South America. They are a continuation of the Rocky Mountain System of North America, and run close to the Pacific coast throughout its length. They are the longest range in the world, extending about 4,500 miles. The Andes are also very high. Some of their summits rise more than four miles above the level of the sea, and are covered with snow that never melts. Bolivia and Chili contain the highest peaks in America.

3. **Volcanoes.**—Fifty or more volcanoes are found among the Andes. Some of these are constantly smoking, while others have violent eruptions and are then quiet for years. Sometimes torrents of water are sent forth; mud and myriads of fish have also been discharged.

Chimborazo and Cotopaxi (find them on the map) are noted giants of the Andes. They have both been ascended to a height of nearly 20,000 feet. At this elevation the air is so rare that it is hard to breathe; blood oozes from the lips and ears.

Cotopaxi is the most formidable of all the burning mountains of the Andes. Its smoke and ashes sometimes spread the darkness of night around, and a hundred miles away its roars are heard like the discharges of cannon.

4. **Earthquakes.**—As in all volcanic countries, earthquakes are frequent. A few years ago a terrible shock destroyed many towns along the coast from Colombia to Chili, and killed 50,000 persons.

5. **The Slopes of the Andes** are very steep. In many parts there are no roads. Goods have to be carried on the backs of mules and llamas; and travelers, in chairs lashed to the backs of natives. Ropes suspended over chasms so deep that the eye can hardly reach the bottom, are sometimes the only bridges. Railroads have been built, however, among the mountains of Peru.

6. **Rainless Region.**—The winds, charged with moisture from the Atlantic and the great rivers, part with it on the eastern slopes of the Andes. A great deal of rain falls there, while most of the Pacific coast of Peru and Bolivia is rainless.

7. **Rivers.**—The important rivers are all east of the Andes. The largest are the Amazon, the Orinoco, and the Rio de la Plata. With their branches they reach to the heart of South America, opening an easy way for commerce.

The Amazon is one of the longest rivers in the world, and pours more water into the ocean than any other. Steamers ascend it almost to the foot of the Andes.

Orino'co signifies *coiled snake*; the natives gave the river this name from its peculiar curves. The engraving on p. 68 shows the vegetation on the Orinoco, and one of the Indian "lake-villages" found here and on



FARM-HOUSE ON A SLOPE OF THE ANDES.

In the foreground of the picture are three domesticated llamas. They are allowed to roam where they will during the day for food, and at night they return to their inclosure. In the background you see a train of llamas descending a mountain-track. The long woolly hair of the llama is woven into cloth, its skin is made into leather, and its flesh and milk are used for food.

Lake Maracaybo. They consist of huts built on piles.

The Rio de la Plata (*silver river*) was so called from the silver ornaments worn by the natives on its banks when the Spaniards discovered it.

8. **Plains.**—Each of the three great rivers traverses extensive plains.

9. The *grassy plains* of the Orinoco have no trees, but in the rainy season are overgrown with dense herbage. During the intense heat of the dry season this withers and dies, and the herds that fed on it have to find pasturage in the highlands.

10. The *forest plains* along the Amazon produce a thick growth of immense trees. Woven together with climbing vines and tangled underbrush, these form walls of vegetation that only wild beasts can penetrate. The spotted jaguar, the deer for which it lies in wait, the long-nosed tapir, the chattering monkey, the terrible anaconda, the lazy alligator, the noisy parrot, bright-winged humming-birds, and myriads of insects, lend life to these dense forests.

11. The *pampas* of the La Plata produce no trees, but yield a coarse grass which grows six feet high and supports cattle without number. These are slaughtered by thousands for their hides. The unsold meat is used for manure.

The great mountain-system of South America is that of the Andes, containing the loftiest peaks in the Western Continent.

The three largest rivers are the Amazon, the Orinoco, and the Rio de la Plata. The Amazon and its branches drain a third part of South America.

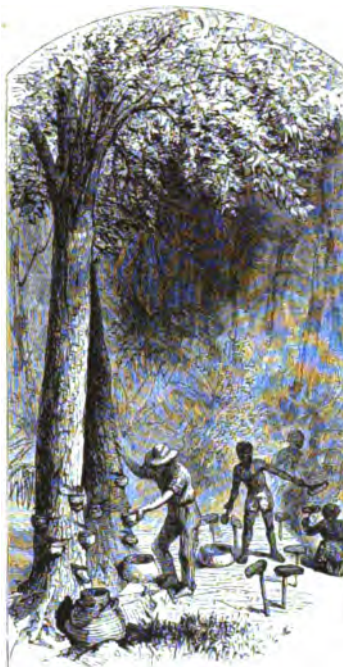
WRITTEN EXERCISE.—Complete the following: The Western Continent, or New World, consists of two Grand Divisions, called —. Of these — is the larger. They are joined by the —. If a ship-canal were cut through this isthmus, it would connect the — Sea with the —, and save many vessels a long voyage round Cape — or through the Strait of —.

The Rocky Mountains of North America are continued in the — of Mexico and the — of South America.

The largest rivers of South America flow into —. The largest lake is —. It might properly be called a —, for it is an arm of the — and indents the coast of —.

LESSON LVII.

1. The **Forests of South America** are rich in valuable woods. Their chief ornament is the palm. Its different parts furnish the Indian with food, drink, and materials for clothing, cordage, weapons, hammocks, mats, baskets, etc. Here,



TAPPING FOR INDIA-RUBBER.

too, are found trees that yield various dye-stuffs, as well as mahogany and rosewood; the cacao, the India-rubber tree, and the cinchona (*sin-ko'nd*), from whose "Peruvian bark" quinine is obtained.

India-rubber is largely exported from northern Brazil. The trees are tapped, and the juice which issues from them is made into flat cakes for export, or applied to clay patterns and dried in the sun or by a fire.

2. The **Cultivated Products** are those of both the Torrid and the Temperate Zone. This is the case even within the tropics; for in the mountainous districts it becomes cooler as we ascend, and we have different kinds of vegetation.

In the warmer regions corn is the principal grain, and rice, coffee, sugar, cotton, tobacco, and tropical fruits, are raised in abundance. Here, as in Mexico, the banana is an important article of food; an acre of bananas yields as much nourishment as twenty-five acres of wheat. From the root of the ma'nioc, a shrub that grows wild in Brazil and is cultivated elsewhere, meal is prepared, on which a large part of the people subsist.

Farther south are the grains of temperate regions. Chili is noted for its wheat; and Paraguay for its *maté* (*mah'tay*), used instead of tea.

3. **Minerals.**—Silver is the most valuable mining product of South America. The richest deposits are in Chili, Peru, and Bolivia. Five thousand silver-mines have been worked during the last three hundred years near Potosi, in Bolivia, and some of them are still productive. They were discovered by an Indian, who grasped



a bush to keep himself from falling. The bush came up in his hand, and particles of silver were found adhering to the root.

4. Gold deposits occur in Chili and the mountainous countries to the north, also in Brazil. Chili is famous for its copper. Other minerals are found in different quarters, but mining is not largely carried on except in Peru and Chili. The diamonds of Brazil and the emeralds of Colombia are much esteemed.

5. **Inhabitants.**—Among the inhabitants, particularly in the mountainous districts, are many Indians. Some of these know little more than how to bring down birds with their long blow-guns and poisoned arrows (*see engraving*)—or, as in Patagonia, to hunt the ostrich and other game, at the full speed of their wild horses. Others are partly civilized and used to labor.

The whites have sprung mainly from Spanish settlers, or have come from countries across the Atlantic. In Brazil there are many negroes, while most of the whites are of Portuguese descent.

6. **Occupations.**—Agriculture and cattle-raising are the chief pursuits. Manufactures are imported, and the products of the herds, fields, forests, and mines, exported. Hides and tallow go from Venezuela, the Argentine Republic, Uruguay, and Brazil; guano and the precious metals,

from Peru; wheat and copper, from Chili; coffee and cocoa, from the north-western countries.

Brazil has the most extensive commerce. It furnishes more than half the coffee used in the world, and exports, besides, sugar, cotton, India-rubber, etc. Most of its flour it gets from the United States.

7. **Forms of Government.**—Brazil is ruled by an emperor, and is called an *Empire*. The emperor is not chosen by the people, but receives the crown from his father. Guiana consists of three colonies belonging to the English, Dutch, and French. All the other countries are republics, except Patagonia, a barren land claimed by both Chili and the Argentine Republic.

8. **Cities.**—The largest city of South America is RIO JANEIRO, the capital of Brazil; it is about the size of Baltimore.

The following cities, most of which owe their importance to their commerce, have each more than 100,000 inhabitants: BUENOS AYRES, SANTIAGO (the largest city west of the Andes), BAHIA, PERNAMBUCO, MONTEVIDEO, LIMA, and VALPARAISO. Describe the situation of each.

PANAMA is at the end of a railroad across the Isthmus. It is connected by steamers with San Francisco, Valparaiso, and other ports.

REVIEW OF SOUTH AMERICA.

LESSON LVIII.

Review.—Memorize the names of the following divisions of South America :—

Countries.—In what part of South America is each?

UNITED STATES OF COLOMBIA, VENEZUELA, GUIANA, BRAZIL, URUGUAY, ARGENTINE REPUBLIC, PATAGONIA, CHILI, BOLIVIA, PERU, ECUADOR, PARAGUAY.

Make a list of these countries in the above order. Opposite each write the name of its capital, and *R* if it is a republic, *E* if an empire.

Islands.—In what water, off the coast of what country?

TRINIDAD, JOANNES, FALKLAND, TIERRA DEL FUEGO.

Capes.—Projects into what water, from what coast?

GALLINAS, ST. ROQUE, HORN, BLANCO.

Mountains.—In what part of South America?

ANDES, Aconcagua, Chimborazo, Cotopaxi.

Bays and Gulfs.—Arm of what, indents what coast?

BAY OF ALL SAINTS, GULF OF GUAYAQUIL, BAY OF PANAMA.

Lakes.—In what part of what country?

MARACAYBO, TITICACA.

Rivers.—Describe each.

MAGDALENA, ORINOCO, AMAZON, MADEIRA, PARAGUAY, PARANA, RIO DE LA PLATA.

Topics.—Let each pupil treat a topic in turn.

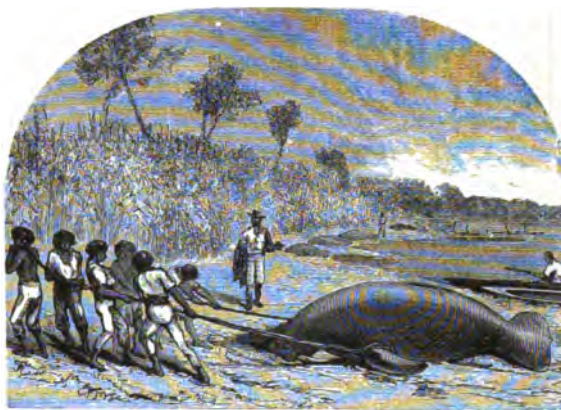
The Surface of South America.—The Andes.—Volcanoes.—Earthquakes.—The Amazon River.—The Orinoco.—The Rio de la Plata.—Grassy Plains.—Forest Plains.—

Pampas.—The Forests.—The Llama.—India-Rubber.—Cultivated Products.—Minerals.—The Inhabitants.—Exports of Different Countries.—South American Cities.

WRITTEN EXERCISE.—Complete the following : South America lies — of North America. The Central American state nearest to it is —. The largest city of South America is —, the capital of —. Lying just north of the Tropic of —, Rio Janeiro is in the — Zone.

Tierra del Fuego is a large —. It is separated from Patagonia by the Strait of —. Ecuador is so called because it lies on the —. The Equator also crosses the northern part of —. The three chief seaports of Brazil are —.

The manatee, or sea-cow, is found at the mouths of rivers, in the tropical regions of South America.



CAPTURING A MANATEE, OR SEA-COW.

E U R O P E .

LESSON LIX.

1. **Crossing the Atlantic.**—We have made the tour of the New World, and must now visit the Old. To do so, we shall return to the United States, and from New York or some other Atlantic port take an ocean-steamer, and sail east. In about ten days, after steaming 3,000 miles, we sight land, and shortly after touch the shore of EUROPE, one of the Grand Divisions of the Eastern Continent.

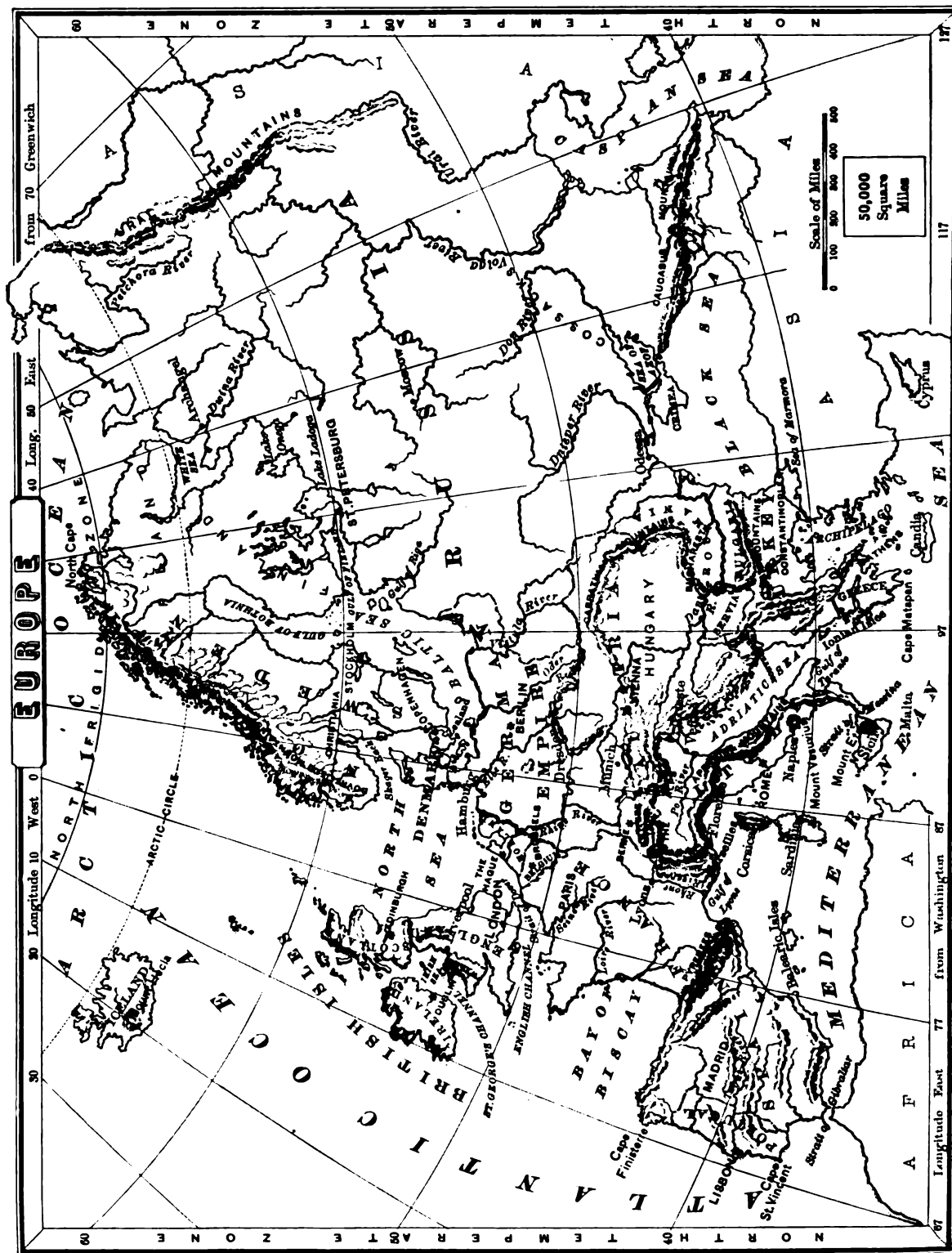
2. **Europe** (see map, p. 70) is less than half as large as North America, but contains about five times as many inhabitants. It is but little larger

than the United States. It lies mostly in the North Temperate Zone. The extreme north extends into the North Frigid Zone.

3. **Proper Names.**—Learn to spell and pronounce,

Adriatic, *ad-re-at'ik*.
Archangel, *ark-ayn'jel*.
Archipelago, *ar-ke-pel'a-go*.
Balearic, *bal-e-ar'ik*.
Balkan, *bahl-kahn'*.
Berne, *burn*.
Bucharest, *bu'kă-rest*.
Christiania, *kris-te-ah'ne-ah*.
Dneiper, *ne'per*.
Doverfield, *do-vre-fe-eld'*.
Edinburgh, *ed'in-bur-ruh*.
Ladoga, *lad'o-gă*.

Loire, *lwahr*.
Marmora, *mar'mo-ră*.
Marseilles, *mar-sales'*.
Messina, *mes-se'nă*.
Munich, *mu'nik*.
Pyrenees, *pîr'e-nee-z*.
Russia, *rush'ă*.
Seine, *sane*.
Sicily, *sis'e-le*.
Taranto, *tah'rahn-to*.
Trieste, *tre-est'*.
Vienna, *ve-en'nă*.



QUESTIONS ON THE OPPOSITE MAP.

LESSON LX.

What ocean is north of Europe ?
 What division and sea are east of Europe ?
 What seas are south of Europe ?
 What ocean on the west ? Bound Europe.
 In what direction would you sail from Europe, to reach North America ? To reach South America ?
 What island on this map forms part of Danish America ?
 The Danes live in Denmark. What is Denmark ? In what direction does it project ?
 In what direction is Iceland from Denmark ? How far is it ? (Apply the scale of miles.)
 What is the capital of Denmark ?
 On what island is Copenhagen ?
 From what country does Skag'er Rack separate Denmark ? What is Skager Rack ? A strait, forming part of the passage between the North Sea and the Baltic.

What three countries of Europe are crossed by the Arctic Circle ? In what zones are these three countries ?
 What mountains are in Norway ?
 What is the capital of Norway ?
 In what part of Norway is Christiania ?
 What country is east of Norway ?
 What gulf and sea border on Sweden ?
 What is the capital of Sweden ?
 In what part of Sweden is Stockholm ?
 What is the largest country of Europe ? In what direction is Russia from Sweden ?
 What arms of the Baltic Sea indent the coast of Russia ?
 What mountains, river, and sea, form the eastern boundary of Europe ?
 What mountains on the south separate Russia in Europe from Asia ?
 Is Russia level or mountainous ?

In what direction do most of the rivers of northern Russia flow ? In what direction, those of southern Russia ?
 What sea is in the north of Russia ? With what ocean is the White Sea connected ?
 What river flows into the White Sea ?
 Name the four principal rivers of southern Russia.
 Which of these flow into the Caspian Sea ? Which flows into the Sea of Azof ?
 What river flows into the Black Sea ?
 What is the capital of Russia ? In what part of Russia is St. Petersburg ?
 What city of central Russia is next to the capital in importance ?
 What port is in the north of Russia ? What port in the south ?
 How is Archangel situated ? Odessa ?
 Name the two largest lakes in Russia.
 What peninsula is in the south of Russia ?
 What is the northern part of Norway, Sweden, and Russia, called ?

LESSON LXI.

What three countries lie west of southern Russia ? Which borders on the Baltic Sea ? Which borders on the Adriatic ? Which borders on the Black Sea ?
 What rivers cross the German Empire ?
 Into what do the Vis'tula and the Oder flow ? Into what, the Elbe and the Rhine ?
 What is the capital of the German Empire ?
 Name three other cities of this empire.
 Which of these is farthest south ?
 What country does the Danube cross ?
 What is the capital of Austria ?
 What is the chief seaport of Austria ?
 What country lies between Austria and the Black Sea ? What mountains are in Austria and Roumania ?

What is the capital of Roumania ?
 What two countries lie between the Danube and Turkey ? Which lies on the Black Sea ?
 What small country is northwest of Turkey ? (Pronounced *mon-tay-nay-gro*.)
 What is the capital of Turkey ? In what part of Turkey is the capital ?
 What country is south of Turkey ?
 What is the capital of Greece ?
 What cape is at the south of Greece ?
 What sea is between Greece and Asia ?
 What sea is between the Black Sea and the Archipelago ? What isles are west of Greece ?
 Name six islands of the Mediterranean.
 Of what is the Adriatic Sea an arm ?
 What country is west of the Adriatic ?
 What mountains in Italy ? What river ?
 What is the capital of Italy ?
 Name two other cities of Italy.
 How is Naples situated ? What mountain is near Naples ? Point toward Naples.
 What mountain is on the island of Sicily ?
 What strait is between Sicily and Italy ?
 What small country is north of Italy ?
 Name the capital of Switzerland.
 What country is west of Switzerland ?
 What bodies of water border on France ?
 What is the capital of France ?
 What two countries form a peninsula in the southwest of Europe ?
 On what waters does Spain border ?
 What is the capital of Spain ? In what part of Spain is Madrid ? What strait is at the entrance of the Mediterranean ?
 What is the capital of Portugal ?
 In what part of Portugal is Lisbon ?
 What bay is west of France ?
 What two small countries are on the North Sea, west of the German Empire ? What is the capital of Belgium ? Of Holland ?
 What isles are northwest of France ?
 Of what is the North Sea an arm ?

DESCRIPTIVE MATTER.

LESSON LXII.

1. **Surface.**—Most of Europe is level and low. One may travel from the English Channel to the Ural Mountains—through northern France, Belgium, Holland, Denmark, the northern part of the German Empire, and Russia—without having to cross a mountain. The Caspian Sea and a large tract northwest of it are below sea-level. Part of Holland, also, is lower than the ocean, and has to be protected from its waves by dikes.

2. **Mountains.**—The Caucasus Mountains, on the boundary of Asia, contain the loftiest peak in Europe.

The highest mountains wholly in Europe are the Alps. Their sublime scenery draws thousands to Switzerland every year. Grand snow-crowned peaks are interspersed with green valleys, where the cattle and goats feed, and with picturesque cabins, where the mountaineer turns their milk into butter and cheese.

3. Many have lost their lives in trying to ascend Mount Blanc, the highest peak of the Alps. Numerous carriage-roads and three railroads have been built through the passes of this chain. In one of the passes, the Great Saint Bernard, the highest inhabited spot of Europe, live some good monks, who keep dogs to rescue travelers overtaken by sudden snowstorms.—Immense masses of snow sometimes break off from the mountain-sides in *avalanches*, and plunge into the valleys, crushing forests and burying villages.

The Alps are the home of the wary chamois; also of a large species of vulture, which makes havoc among the sheep and goats, and is said sometimes even to carry off infants in its talons.

4. **Map Questions**—Name four mountain-ranges of Europe that extend from east to west. Name two ranges that run northwest and southeast. What two ranges run nearly north and south? What is the general direction of the mountain-systems of North America? Of the principal mountain-system of South America?



SCENE IN THE ALPS.

5. **Volcanoes.**—Mount Vesuvius and Mount Etna are volcanoes, which have eruptions from time to time. Eighteen hundred years ago, during a terrible eruption of Vesuvius, three cities were buried in cinders and ashes. For hundreds of years they lay forgotten, till in digging a ditch some ruins were discovered. One of these ancient cities was then dug out. It is interesting to see its streets, houses, temples, and shops, just as they were so long ago.

6. **Seas, Gulfs, Bays.**—Observe how many seas, gulfs, and bays, indent the coast of Europe. These indentations furnish many good harbors, on which great cities have grown up by their trade. They have helped to make Europe the most important Grand Division of the Old World. The Caspian Sea, though salt, is really a lake, for it is not an arm of any larger body of water.

7. **Rivers.**—Europe has many navigable rivers, by which the interior of the country can be reached. The Volga, which is the longest river, is noted for its salmon and sturgeon, the Danube for its commerce, and the Rhine for its fine scenery and old ruins.

8. **Map Questions.**—What river flows into the Arctic Ocean? Into the Atlantic? Into the Bay of Biscay? Into the English Channel? Into the Adriatic? Into the Gulf of Lyons? Into the Mediterranean? What rivers does the North Sea receive? The Baltic? The Black? The Caspian? On

what waters would you sail from Odessa to Trieste? From Vienna to Hamburg? From Archangel to Marseilles? From Dublin to Constantinople? Which countries of Europe border on the Mediterranean? On the Atlantic? Which have no seacoast? In what part of Europe do you find the most lakes? Name two large lakes in this quarter.

The largest country of Europe is Russia. The principal mountain-chain is the Alps; their highest peak is Mount Blanc. The chief volcanoes are Vesuvius and Etna. The longest river is the Volga. The largest lake is Lake Ladoga.

LESSON LXIII.

1. **The Climate of Europe** is cold in the north, which is crossed by the Arctic Circle. It is moderate in the middle regions, and warm and genial in the south, which is sheltered from north winds by the mountain-ranges running east and west. The climate is much milder than in corresponding regions in the New World. London is farther north than any city in America, but it is warmer than Boston.

2. **Productions.**—As in North America, the productions vary with the climate. Along the cold shores of the Arctic, vegetation is scanty; and in Russia, desolate, treeless plains occur. Thence we come in succession to the region of barley, potatoes and oats, flax and hemp, wheat, tobacco, corn, the vine—and finally of the olive, fig, orange, and lemon.

3. Neither cotton nor sugar-cane is a staple of Europe, though some cotton is produced in Turkey, Greece, and Italy. Sugar is made principally from the beet, which is largely raised for the purpose in France, the German Empire, and Russia. The mulberry, on the leaves of which the silk-worm feeds, flourishes in southern Europe. There are dense forests in parts of Russia and on the mountain-slopes.

4. **Northern Europe.**—We must now look at the separate countries. Let us begin at the north.

5. **Norway and Sweden** do not produce grain enough for their own use. Forests, fisheries, and mines, are important sources of wealth. Many cattle are raised in Norway. Hundreds of vessels frequent the Atlantic coast in the fishing season. Sweden produces excellent iron, and Norway copper. Each makes its own laws, but Norway is under the same king as Sweden.



LAPPS AND REINDEER.

The north of Norway and Sweden, and the adjacent part of Russia, are called Lapland. Here for some days in winter the sun does not rise at all. The people are called Lapps; they are short and of a yellowish complexion. The sea Lapps live by fishing; the mountain Lapps are supported by their herds of reindeer. They use the skin of this animal for clothing, its sinews for thread, and its milk and flesh for food.

6. **Russia** covers more than half of Europe. It extends from the extreme north to the Black Sea; hence there is great variety in the climate and productions. Hemp and flax are among the staples of middle Russia. Southern Russia is an excellent wheat region, Odessa on the Black Sea being its chief shipping-point.

7. Cattle abound on the southern plains, and are exported, together with hides, tallow, and timber. Manufactures are rapidly increasing.

8. Of wild animals, the bear, found in the mountains, is the emblem of Russia. Packs of hungry wolves sometimes attack the solitary traveler, and fall upon the wild horses that roam over the prairies.

9. Great fairs are a feature of the commerce of Russia. Hundreds flock to them from distant parts of Europe and Asia, to trade in all kinds of wares.

10. Russia is a vast empire. The emperor is generally called Czar. St. PETERSBURG, the capital, was founded by Peter the Great. Moscow is a large manufacturing and commercial city.

St. Petersburg, the capital of the Russian Empire, ranks fifth in size among the cities of Europe.

LESSON LXIV.

1. **Central Europe.**—In Central Europe we have the Austrian and the German Empire, the kingdoms of Denmark, Holland, and Belgium, and the republics of Switzerland and France.

A kingdom is a country ruled by a king or queen.

2. **Austria.**—An empire is generally a government in which several distinct peoples or states are united under one ruler. This is the case with the Austrian Empire. One of its large divisions is Hungary. Here the fertile soil produces wheat in great abundance. The vine flourishes, and noted wines are made.

3. In other parts, Austria is mountainous and rich in minerals. Its manufactures of glass, linen, etc., keep many persons employed. **VIENNA**, the capital, is the third city of Europe in size.



4. **The German Empire** is made up of twenty-six states. It contains extensive coal-fields, and mountains abounding in minerals. More grain is raised than is needed for home use. The vineyards along the Rhine are as famous as its ruined castles.

5. Flax is a staple, and busy looms are everywhere at work, weaving it into linen. Sheep are

raised in great numbers, and yield superior wool, which is partly exported and partly woven into cloth. The Germans are ingenious manufacturers; they make many of our toys. Great attention is paid to education.

6. **BERLIN**, the capital of the empire, ranks fourth among the European cities; and **HAMBURG**, the chief seat of German commerce, is third among European seaports.

7. **Denmark, Holland, and Belgium**, are well adapted to agriculture. Both the Danes and the Dutch (as the people of Holland are called) raise many cattle, and among those on the coast fishing is an important business. The Dutch are a thrifty people, and have shown great enterprise in foreign commerce.

The Dutch need all the land they can get for tilling. How do you think they have managed to make some of their most fertile fields? They have built high banks round swamps and lakes, and then pumped out the water by means of windmills. Numerous canals traverse the country, on which both men and women skate to market in winter, pushing before them sleds loaded with produce. The land is very carefully cultivated.

Storks, tall solemn-looking birds with long bills, are very common in Holland. They build their nests on the roofs of houses, in city as well as country, and are thought to bring good luck to the dwellings that they thus honor. To kill a stork is forbidden under heavy penalties.

8. **Belgium** is rich in coal and iron. It is a great manufacturing country, and contains more people in proportion to its size than any other land in the world. Fine laces and linens are made in Belgium. Brussels carpets are so called from the capital of Belgium, where they were first made.

9. **Switzerland** is the Alpine Republic. Its people are noted for their love of freedom. Did you ever hear of William Tell? Can you relate his story? Even if, as some say, no such person ever lived, the story gives us an idea of the spirit of these hardy mountaineers.

10. Many of the Swiss find employment in attending to their flocks and manufacturing. If you enter a peasant's house, you will likely see him carving some useful article or ornament out of wood, and his wife and daughter embroidering, spinning, or weaving. Swiss watches and jewelry are much esteemed.

11. **France**, extending from the North Sea to the Mediterranean, produces the grains and root-crops of central Europe and the fruits of the south. The cultivation of grapes and the making of wine are leading industries. Vineyards extend for miles over central France, and the gathering of the grapes is a time of general merrymaking.

12. Silk is an important product of France. **LYONS**, the second city of the republic, is the chief seat of the silk-manufacture; it may almost be called a city of weavers. Other important manufactures are woollens, laces, and embroideries, jewelry and bronzes, kid gloves, etc. French goods excel in taste and elegance.

13. France has valuable iron-mines and rich coal-fields.

14. **PARIS**, the French capital, is the gayest and most delightful city of Europe. **MARSEILLES**, on the Mediterranean, is the most important seat of the large foreign commerce of France.

WRITTEN EXERCISE.—*Complete the following:* In making a voyage from the mouth of the Don to the Atlantic, we should have to pass through five seas; namely, —. Four large peninsulas of Europe project southward; the most northerly of these contains the countries of —. The other three project into the —. One peninsula in central Europe points north; most of it is included in —. The capital of Denmark is on an island called —. Its name, C—, means *trading-port*.

The principal port of Russia on the Black Sea is —. The chief seaport of Austria is —; of France, —; of Germany, —. The island of Corsica, in the — Sea, belongs to France.

The Danes live in —, the Dutch in —, the Swiss in —, the French in —, the Lapps in —. Lapland is in the — Zone.

LESSON LXV.

1. **Southern Europe.**—We have now reached the countries of Southern Europe. These are the principalities of Rouma'nia, Bulga'ria, Servia, and Montenegro—the empire of Turkey—and the kingdoms of Greece, Italy, Spain, and Portugal.

2. **General Description.**—This region is mostly high, and much of it mountainous. Its climate is mild, its vegetation luxuriant. Manufactures are few. The people till the fertile soil, and get



abundant returns,
though they know

nothing of the mowers, reapers, and other improved implements, which we are accustomed to see in this country. Wines, olive-oil, fruits, grain, silk, and wool, are the most valuable products for export.

3. **The Principalities** are governed by sovereigns called Princes, who are really kings. Roumania, Bulgaria, and Servia, were formerly included in Turkey, but are now independent. Horses and cattle abound in Bulgaria and Servia.

The little state of Montenegro is mountainous; its name means *black mountains*. Mountaineers love freedom, and the Montenegrins have fought bravely for theirs against Turkey on many fields.

4. **Turkey** is called the *Ottoman Empire*, from a chief who founded it. It embraces more territory elsewhere than it has in Europe. The ruler is styled Sul'tan. The people are often cruelly oppressed.

5. Turkey has valuable minerals, a fine situation for commerce, a productive soil; but the people are indolent and ignorant, and do not turn these advantages to account.

6. Turkey carpets and Turkey morocco are the best-known manufactures. Roses are cultivated in large fields, and from their leaves the perfume



BEFORE THE KREMLIN, MOSCOW, ON EASTER-EVEN.



ITALIAN PEASANTS AND SCENERY.

The Kremlin, the ancient citadel of Moscow, is surrounded by high walls. It is an irregular pile of churches, monasteries, and public buildings, including an arsenal and palaces. With such reverence is its chief gate regarded that even the Czar uncovers his head as he passes through it. Before the Kremlin, on Easter-even, the people of Moscow assemble at midnight with torches, to celebrate the festival.

known as *at'tar of roses* is distilled. CONSTANTINOPLE, the capital, has a fine harbor called "the Golden Horn".

7. The Turks were a fierce people, who came into Europe from the East several hundred years ago and seized on this pleasant land. For a time they threatened to overrun all Europe. Latterly their power and dominions have diminished. The Turks are Mohammedans, or believers in Mohammed, who claimed to be a great prophet and founded a religion of his own. Their sacred book is the Koran, which they think was given to Mohammed directly from Heaven. Mohammedan churches are called *mosques*.

8. **Greece.**—In Greece flourished of old the most cultivated of nations. ATHENS, the present capital, was once a magnificent city of temples and statues, the home of the greatest orators and poets. But the modern Greeks are not much like their fathers.—"Currants," which are really dried seedless grapes, are the great export of Greece.

9. **Italy**, the middle peninsula of southern Europe, includes the islands of Sardinia and Sicily. It is the land of the silk-worm and the olive. Olive-oil is used by the peasants instead of butter. The coasts yield the fish called sardines and ancho'vies; also coral, which is torn from rocks

in the depths of the sea by divers or with drag-nets.

Consult Figuiet's "Ocean World," p. 140.

10. Italy was the country of the old Romans, who once ruled the world. ROME is now, as it was then, the capital; it contains the grandest of all churches (St. Peter's), and is the residence of the Pope. NAPLES, on a bay celebrated for its beauty, is the commercial metropolis of Italy. FLORENCE is famous for its picture-galleries. VENICE, "the Queen of the Adriatic," is built on islands; here canals take the place of streets, and gon'dolas, long graceful boats bending up at each end, are used instead of carriages.

11. **Spain and Portugal** occupy the southwestern peninsula, a plateau traversed by mountains. Spain has the richest quicksilver-mine in the world, and its sheep produce the choicest wool. The oak whose bark furnishes us with corks is a native of the peninsula. The port wine of Portugal and the sherries of Spain are widely known.

12. At one time these countries were among the most enterprising on the ocean, and their sailors made many discoveries. They still possess

various islands and trading-posts in distant lands. The capital of each country is also its largest city. An earthquake once destroyed the greater part of Lisbon and 50,000 of its inhabitants.

Southern Europe yields choice wines, olive-oil, fruits, and silks. Constantinople is its largest city. Italy ranks first in the production of raw silk. Lyons, in France, is the great silk-weaving city.

THE BRITISH ISLES.

LESSON LXVI.

1. **The British Isles.**—We have now made the tour of “the Continent,” or mainland of Europe. We shall next visit England. This country, with Scotland and Wales, forms the island of Great Britain. Great Britain and Ireland are called the British Isles. Here we have them on a larger scale.



Map Questions.—To what country of “the Continent” is England nearest? What waters separate England from France? What country is west of England? What country is north of England?

What hills separate Scotland from England? What hills are in Scotland?

What is the capital of England? How is London situated? Point toward London. What seaport of England is next to London in commercial importance? *L.*

What four manufacturing cities in the interior?

Name the ancient capital of Scotland. *E.* What is the commercial metropolis of Scotland? *G.*

A firth is a narrow arm of the sea at the mouth of a river. Name two firths on the coast of Scotland. On which coast are they?

What three groups of islands belong to Scotland? Which of these is farthest north? Farthest west?

What separates Ireland from England? From Wales? What cape is at the southwest of Ireland?

What city is the metropolis of Ireland? *D.* What port is in the northeast of Ireland? In the south?

What waters wash the coast of Ireland? Of England? Of Wales? Of Scotland?

2. **The United Kingdom.**—The four countries in the British Isles were once under separate governments, but they now form “the United Kingdom of Great Britain and Ireland”. This is one of the great powers of the world—the greatest in commerce and manufactures. Its ships are on every sea. It has possessions in every clime. It is sometimes called the British Empire, but its sovereign is a king or queen.—What countries and islands in America belong to Great Britain?

3. **England** teems with great cities, where thousands earn their bread in factories. LONDON, the capital, on both sides of the Thames (*temz*), is the largest city and the greatest center of commerce in the world. It is three times as large as New York.

LIVERPOOL is the second commercial city of the kingdom; to this port are brought great quantities of cotton from the United States, to be worked up in the mills of MANCHESTER. Woolens are made at LEEDS; machinery and firearms, at BIRMINGHAM (*bir'ming-um*); knives, razors, and plated ware, at SHEFFIELD. England has great stores of iron in her mines, and plenty of coal to use in her manufactures.

4. The soil is very carefully cultivated, but there are so many to be supplied that grain has to be imported. The United States, Russia, and other countries, contribute of their wheat, and take English manufactures in return.

5. **Scotland** is rough, especially in the Highlands of the north. Here we find shepherds, tending their sheep on the hills and moors. **EDINBURGH** (*ed'in-bur-ruh*), the ancient capital, is surpassed in size by **GLASGOW**, which is a busy seat of manufactures and commerce.

6. **Wales** is a rugged and picturesque land, rich in coal and iron. Many of the Welsh pass a great part of their lives down in dark mines.

7. **Ireland** is called "the Emerald Isle" from its fresh, green meadows. Rich landlords let out their large domains to tenants, who have as much as they can do to get a living. Potatoes are the main dependence. Great numbers of Irish have emigrated to America. **DUBLIN**, with its fine public buildings, is a handsome city. Next to it is **BELFAST**, where the famous Irish linen is made.

8. **The Smaller Islands**.—Perhaps you have seen shaggy little Shetland ponies, and wished you had one to ride. Find on the map the islands from which they come. In the Shetland Islands, as well as the Orkneys and Hebrides (*heb're-deez*), cattle-raising and fishing are leading employments.

Myriads of sea-fowl frequent the coasts of these islands. How do you think the people manage to get their eggs and feathers? By letting men down with ropes from the dizzy heights that overhang the sea, and robbing the nests. Sometimes the jagged rocks cut the rope, and the poor islander is dashed to pieces.

The five great powers of Europe are Great Britain, the German Empire, Russia, France, and Austria.

The five largest cities of Europe are London, Paris, Vienna, Berlin, and St. Petersburg.

WRITTEN EXERCISE.—Complete the following: To Great Britain belong the Dominion of — and the colony of —, in North America; the colony of —, in Central America; the island of —, in the West Indies; and part of —, in South America. To Spain belong — and — in the West Indies. Denmark owns — and — in North America. Holland and France hold parts of — as colonial possessions.

Corsica belongs to —, Candia to Turkey, Zealand to —. Sardinia and Sicily belong to —, the Ionian Isles to G—. To Scotland are attached the —, —, and — Islands.

Italy is shaped like a —. The toe of the boot projects into the Strait of —. The hollow of the foot is indented by the —. The heel is opposite to —. On one side of the boot-leg is the — Sea, on the other the —.

REVIEW OF EUROPE.

LESSON LXVII.

Memorize the names of the following divisions of Europe. Bound each country. Describe the situation of each capital and natural division:—

Country.	Capital.	People.	Government.
NORWAY,	Christiania,	Norwegians,	} Kingdom.
SWEDEN,	Stockholm,	Swedes,	
RUSSIA,	St. Petersburg,	Russians,	Empire.
AUSTRIA,	Vienna,	Austrians,	Empire.
GERMAN EMPIRE,	Berlin,	Germans,	Empire.
DENMARK,	Copenhagen,	Danes,	Kingdom.
HOLLAND,	The Hague,	Dutch,	Kingdom.
BELGIUM,	Brussels,	Belgians,	Kingdom.
SWITZERLAND,	Berne,	Swiss,	Republic.
FRANCE,	Paris,	French,	Republic.
ROUMANIA,	Bucharest,	Roumanians,	Principality.
BULGARIA,	Sophia,*	Bulgarians,	Principality.
SERVIA,	Belgrade,*	Servians,	Principality.
MONTENEGRO,	Cettigne,*	Montenegrins,	Principality.
TURKEY,	Constantinople,	Turks,	Empire.
GREECE,	Athens,	Greeks,	Kingdom.
ITALY,	Rome,	Italians,	Kingdom.
SPAIN,	Madrid,	Spanish,	Kingdom.
PORTUGAL,	Lisbon,	Portuguese,	Kingdom.
ENGLAND,	} London,	English,	} Kingdom.
SCOTLAND,		Scotch,	
WALES,		Welsh,	
IRELAND,		Irish,	

Islands.—IONIAN, SICILY, SARDINIA, CORSICA, BRITISH ISLES.

Capes.—NORTH, MATAPAN', FINISTERRE (*fin-is-tayr'*), CLEAR.

Mountains.—DOVREFIELD, URAL, CAUCASUS, BALKAN, CARPATHIAN, ALPS, APENNINES, PYRENEES.

Seas.—Arm of what, washes what coasts?—WHITE, CASPIAN, BLACK, MEDITERRANEAN, ADRIATIC, NORTH, BALTIC.

Bay and Gulfs.—BISCAY, BOTHNIA, FINLAND.

Straits.—MESSINA, GIBRALTAR, DOVER.

Channels.—Describe like straits.—ENGLISH, ST. GEORGE'S.

Lakes.—LAD'OGA, ONE'GA.

Rivers.—URAL, VOLGA, DON, DANUBE, PO, RHONE, RHINE.

Topics.—Let each pupil treat a topic in turn.

The Surface of Europe.—The Climate of Europe.—The Alps.—Mount Vesuvius.—Russia.—Austria.—The German Empire.—France.—The British Empire.—The Dutch.—The Swiss.—Southern Europe.—The chief Capitals of Europe.—The Seaports.—The Rivers.

* Sophia (*so-fe'a*) is in the southwestern part of Bulgaria. Belgrade' is on the right bank of the Danube. Cettigne (*chet-teen'yay*) is in the southwestern part of Montenegro.

A F R I C A .



HALT OF A CARAVAN.

DIAMOND-MINING IN SOUTH AFRICA.

Goods are transported across the deserts of Africa by means of caravans. These are companies of merchants, perhaps several hundred, who thus band together for protection. They carry various wares, which they exchange with the natives for gums, gold-dust, ostrich-feathers, elephants' tusks, slaves, etc. The beast of burden used in these journeys is the camel. This animal can live on the coarsest food, and go without water for a week. Scattered through the desert are o'ases, or fertile spots, where there are springs and palm-trees. Here the caravans rest. The sketch on the left shows a caravan arriving at an oasis. The prominent tree there shown is the date-palm. It is as useful in various ways as the palms of South America. The dates you may have eaten, are its fruit dried.

On the right we have a diamond-mine of South Africa. The earth is broken up with picks and spades, raised to the surface in buckets with pulleys, passed through sieves, and washed. The gravel that remains is then searched for diamonds.

LESSON LXVIII.

1. **Africa.**—We have now traveled through North America, South America, and Europe. South of Europe is the Mediterranean Sea. Crossing this, we enter a fourth Grand Division—AFRICA. You have a map of Africa on p. 81.

2. **Size.**—Africa is larger than either North or South America. It is three times the size of Europe. Applying the scale of miles on the meridian marked 97 in the lower margin, find the greatest length of Africa from north to south. Applying the scale on parallel 10 North, find the greatest width of Africa from east to west.—In what zones is Africa? In what zone is the greatest part? Which cape of Africa is farthest from the Equator?

3. **Drawing the Map.**—Copy the outline of Africa from the map as nearly as you can. Locate the Equator and the Tropics. Write the names Torrid Zone, North Temperate Zone, South Temperate Zone, in the regions they comprise.

4. **Proper Names.**—Learn to spell and pronounce the following proper names:—

Benguela, *ben-gay'lä*.

Cairo, *ki'ro*.

Dahomey, *dah-ho'may*.

Damara, *dä-mah'rä*.

Fezzan, *fez-zahn'*.

Guardafui, *gwar-dä-five'*.

Kalahari, *kah-lah-hah're*.

Kilimanjaro, *kil-e-mahn-jä-ro'*.

Mourzouk, *moor-zook'*.

Mozambique, *mo-zam-beek'*.

Natal, *nah-tahl'*.

Niger, *ni'jer*.

Nyassa, *ne-ahs'sä*.

Sahara, *sä-hah'rä*.

Sierra Leone, *se-eh'r'rä le-p'ne*.

Soudan, *soo-dahn'*.

Suez, *soo'ez*.

Tananarivo, *tah-nah-nah-rr*.

Tanganyika, *tahn-gahn-ye'kä*.

Transvaal, *trans-vahl'*.

Tripoli, *trip'o-le*.

Zambesi, *zam-bay'ze*.

QUESTIONS ON THE OPPOSITE MAP.

LESSON LXIX.

Bound Africa. In what direction is Africa from Europe? What countries of Europe are nearest to Africa?

What country of Africa touches the Strait of Gibraltar? What mountains are in Morocco?

Name the two capitals of Morocco. Which is the more northerly?

What islands are west of Morocco? To what country do the Madeira Islands belong?

What country is east of Morocco? Name the capital of Algeria.

What two countries are east of Algeria? Which of these is the more northerly?

What is the capital of Tu'nis? What cape is on the coast of Tunis? What is the capital of Trip'oli?

What country, tributary to Tripoli, lies south of it? What is the capital of Fezzan?

What is the easternmost country south of the Mediterranean Sea? Point toward Egypt.

In what part of Egypt is Egypt Proper? In what part is Nubia?

To what line on the south does Egypt extend? What river traverses Egypt?

What two lakes have the Nile for their outlet? From what country does the Blue Nile flow?

What is the capital of Egypt? How is Cairo situated? What sea is on the eastern coast of Egypt?

What isthmus separates the Red Sea from the Mediterranean? What does the Isthmus of Suez connect?

What strait is at the entrance of the Red Sea? What is the most easterly point of Africa called?

What mountainous country lies southeast of Nubia? What is the capital of Abyssinia?

What mountains are in eastern Africa? What peak is the highest mountain of Africa? *K.*

What country is between the Mountains of the Moon and the Indian Ocean?

What country lies on Mozambique Channel? What is the capital of Zanguebar? Of Mozambique?

What large island is east of Mozambique? What large river crosses Mozambique?

What two countries lie on the Vaal (*vahl*) River? Of what river is the Vaal a branch?

Where is Zulu Land? What two countries are on the coast, southwest of Zulu Land?

Name the southernmost country of Africa. What mountains in Cape Colony? What cape?

What is the capital of Cape Colony? What river bounds Cape Colony on the north?

What oceans wash the shores of Cape Colony?

What countries are on the western coast, between Cape Colony and Guinea (*ghin'e*)?

What large river crosses Guinea south of the Equator? What river crosses Guinea north of the Equator?

Name some of the divisions of Guinea. What gulf indents the coast of Guinea?

What mountains are on the northern boundary of Guinea?

LESSON LXX.

What country lies on the Atlantic coast, west of Guinea? What is the capital of Liberia?

What capital is on the coast, northwest of Monrovia? Of what colony is Freetown the capital?

What country on the western coast is named from its two chief rivers?

What cape is on the coast of Senegambia? Name two settlements in Senegambia.

On what coast is Cape Blanco? To what country does Sahara extend on the east?

What islands are in the Atlantic, opposite the northern extremity of Sahara?

To what country do the Cana'ry Islands belong?

What countries on the north does Sahara touch? What country is south of Sahara?

What large river flows through Soudan? Name two places on the Ni'ger River.

What lake is in Soudan? With what cities is Kouka (*koo'k'd*) connected by a caravan route?

What is the chief river of Central Africa? Name the largest lake in Africa.

What lake is northwest of Lake Victoria? What lake is southwest of Lake Victoria?

What lake is west of Mozambique?

What falls are on the Zambesi River? Near what river is the Kalahari Desert?

Name the four capes at the north, east, south, and west, of Africa.

What countries of Africa border on the Mediterranean Sea? On the Indian Ocean? On the Atlantic?

What capitals are on the Mediterranean? What capital is on an island?

What countries in Africa are crossed by the Equator? What countries lie wholly in the Torrid Zone?

What countries are crossed by the Tropic of Cancer? What countries lie in the North Temperate Zone?

What countries are crossed by the Tropic of Capricorn? In what zone is Cape Colony?

Which is warmer, Senegambia or Cape Colony?

On what waters would you sail in making a voyage from Cairo to Zanzibar?



DESCRIPTIVE MATTER.

LESSON LXXI.

1. **Africa** has not the advantages for commerce that Europe and North America have. There are few bays affording good harbors, few rivers penetrating the interior. The climate is hot, and in many parts unhealthy. Deserts cover thousands of miles. As a consequence of all this, Africa is behind the other Grand Divisions in civilization.

2. **Inhabitants.**—Few white men have gone there to live. The people back from the coast are negroes, mostly ignorant and savage. They have no schools or newspapers, no steamboats or railroads. Their manufactures are of the simplest sort. The different tribes are often at war with one another, and make slaves of the prisoners taken. Some even feast on the flesh of their captives. Find on the map where these fierce *cannibals* live. To which grade of society (*p.* 16) do they belong?

3. **Surface.**—Africa is mostly a plateau, bordered with a strip of low coast-plain. The principal mountains are the Atlas range, which contains various minerals, though little use is made of them. Mount Kilimanjaro, near the eastern coast, south of the Equator, is the highest peak in Africa. Its summit is white with perpetual snow.

4. **Rivers.**—Africa has five great rivers. The Nile is the longest. Every year, owing to rains in the upper country, the Nile overflows its banks, and for several months its lower valley is under water. Mud is deposited, and a strip along the river is thus made fertile. When the waters subside, abundant crops of wheat, barley, beans, tobacco, etc., are raised. The ancients used to say, "Egypt is the gift of the Nile."

Consult Prime's "Boat Life in Egypt," p. 76.

5. The other important rivers are the Niger—the Congo, which has recently been explored—the Zambesi, with its grand Victoria Falls rivaling Niagara—and the Orange.



ANIMAL LIFE ON AN AFRICAN RIVER.

6. **Animals.**—Africa is the home of large and fierce animals. The elephant is hunted for its tusks, which furnish ivory. The majestic lion, the spotted leopard, the long-necked giraffe, the striped zebra, and many species of nimble antelopes, are all found in Africa.

The crocodile lurks for its prey in the rivers. Here also sports the huge hippopotamus, or river-horse (*see engraving above*). The rhinoceros guides its young before it through the grass, with the long sharp horn on its nose; and the ugly gorilla, a great ape that looks like a man, makes the forests on the lower Congo echo with its roar.

7. **Vegetable Products.**—In the Mediterranean countries, grains and tropical fruits, cotton and indigo, are raised; in the south, wheat, potatoes, flax, etc. The negro tribes live on the manioc-root, rice, millet, yams, the fruit of the palms, and the products of their flocks.

8. **Trees.**—There are many species of palms, without branches, but crowned with long, graceful leaves. They yield dates, cocoanuts, sago, and the palm-oil of Guinea.

From the acacia-tree in Nubia and elsewhere issues a juice which hardens into gum-arabic. The ba'obab, or monkey-bread tree, flourishes in Senegambia; it is remarkable for its enormous girth, and the distance to which its lower branches spread out, hanging to the ground. The bodies

of executed criminals are sometimes inclosed by the natives in the hollowed trunks of baobab-trees, where they become dried like mummies.

9. **Sahara**, the Great Desert, extends from the Atlantic nearly to the Nile. It is more than half as large as the United States. Its only valuable product is salt. The heat is terrible. Violent sand-storms at times darken the air, and threaten every living thing with destruction. When such a storm overtakes a caravan, the camels fall on their knees, and thrust their heads to the ground with closed nostrils; the drivers throw themselves on their faces, and seek shelter beneath the loads.

Africa is connected with Asia by the Isthmus of Suez. Its longest river is the Nile; its highest peak is Mount Kilimanjaro. Egypt is its most important country, and Cairo its largest city.

The hippopotamus, giraffe, and gorilla, are peculiar to Africa. The palm is the most useful tree.

LESSON LXXII.

1. **The Barbary States**.—Morocco, Algeria, Tunis, and Tripoli, lie on the Mediterranean Sea, west of Egypt. They are called "the Barbary States," from the Berbers, who were once the ruling people. Many of the inhabitants are Mohammedans. Carpets and rugs, leather and the red caps worn about the Mediterranean coasts, are made and exported.

2. Morocco is ruled by a sultan, who lives by turns at FEZ and MOROCCO, the capitals.

You have seen the handsome leather called *morocco*. It is made of goat-skins, and gets its name from this country. Many goats are raised in Morocco for their skins; also sheep with broad fat tails weighing forty pounds or more. The Barbary horses (whence our word *barb*, meaning a horse) are fleet and spirited; it is forbidden to export them from Morocco, but the sultan can seize any that he wants for his army.

3. Algeria is a colony of France, and many Frenchmen live there. The capital, ALGIERS, is built on a bay, from which its white houses rise on terraces.

4. Tunis and Tripoli are each ruled by a *bey*, who has absolute power over his subjects. The Bey of Tripoli is appointed by the Sultan of Turkey. Barca and Fezzan pay tribute to Tripoli.

5. **Egypt**, centuries ago, was the seat of a powerful nation, advanced in science and the arts. The learned men of other countries went there to study. The valley of the Nile still contains the ruins of grand temples and cities, and pyramids built by its ancient people which are among the wonders of the world.

6. At the present day Egypt is in name dependent on Turkey. Its sovereign has the title of Khedive (*keh-deev'*). Large tracts have been annexed on the south, and the khedive now rules as far as the Equator.

7. Egypt is the seat of considerable commerce. Within its limits a ship-canal has been built across the Isthmus of Suez, making Africa really a separate continent. Vessels that used to go to the East Indies round the Cape of Good Hope can now pass from the Mediterranean to the Red Sea, and save a large part of the voyage.



OSTRICH-FARM IN CAPE COLONY.

The ostrich is the largest of birds. It inhabits the sandy plains of Africa, from the Barbary States to Cape Colony. It is hunted for its beautiful feathers, but is so fleet that, unless fresh horses are mounted from time to time in the chase, it will escape. The Bushman covers himself with an ostrich-skin, and thus manages to get near enough to shoot the bird with a poisoned arrow. In Cape Colony, ostrich-raising, from tame birds, has become a profitable employment. The eggs, each of which is as large as two dozen hen's-eggs, are sometimes hatched by artificial heat.

8. **CAIRO**, the capital, is the largest city of Africa. Railroads connect it with different points. It is a Mohammedan city, and from its mosques five times each day the faithful are called to prayer.

9. **Eastern Africa** contains no countries of much importance. The kingdom of Abyssinia produces grains, and some cotton and coffee. The coast regions southeast of Abyssinia and south of the Equator are occupied mostly by negro tribes, each under its own chief. Some of them keep large herds. The Sultan of Zanzibar holds some towns on the coast, and the Portuguese have settlements in Mozambique. Both Mozambique and Zanguebar are very fertile, yielding rice, spices, and excellent timber. Wild animals abound.

10. **Southern Africa**.—Great Britain is the leading power in Southern Africa. Cape Colony and Natal belong to it, and it has recently annexed Transvaal. Caffraria still belongs to the warlike Caffres; and Zulu Land, the scene of England's latest war with the natives, to the Zulus. The Orange River Free State is in the hands of Dutch boers, or farmers.

11. Cape Colony is a grazing country. Wool is the chief product. **CAPE TOWN**, the capital, was once an important stopping-place for vessels on the route to and from the East Indies. Diamonds, found in abundance near the Orange and Vaal Rivers, have attracted many to that region.

12. **Western Africa** belongs mostly to negro tribes, fierce and ignorant, though some of them till the soil and are skilled in certain manufac-

tures. The English, French, and Portuguese, have settlements on the coast. Sierra Leone is a small British colony that was established for negroes taken from slave-ships. Liberia is a republic, which was founded for freedmen from the United States. **MONROVIA** is the capital.



NAGROES OF WESTERN AFRICA.

13. **Soudan** is thickly peopled with negro tribes, partly civilized. They occupy a pleasant country, raise grain and fruits, pasture cattle and sheep, carry on commerce, and have cities of some size. The tribes of Central Africa, south of the Equator, are fierce and barbarous.

Egypt exports grain. The Suez Canal is a great highway of commerce. **Cape Colony** is noted for its diamonds; **Guinea**, for its palm-oil.

WRITTEN EXERCISE.—*Complete the following:* The principal river of Africa is the —, which every year —. The Nile is the outlet of Lakes — and —. There are two extensive deserts, called —. The largest bird is the —.

The Barbary States are Morocco, ruled by a —; Tunis and Tripoli, ruled by —; and Algeria, a colony of —. The largest island near Africa is M—, which exceeds in size the German Empire.

REVIEW OF AFRICA.

LESSON LXXIII.

Learn in order the names of the following divisions of Africa. Bound each country. Describe the situation of each capital and natural division, as heretofore directed:—

Country.	Capital.	Country.	Capital.
MOROCCO,	Morocco.	ZANGUEBAR,	Zanzibar.
ALGERIA,	Algiers.	MOZAMBIQUE,	Mozambique.
TUNIS,	Tunis.	NATAL,	Pietermaritzburg.
TRIPOLI,	Tripoli.	CAPE COLONY,	Cape Town.
EGYPT,	Cairo.	LIBERIA,	Monrovia.
ABYSSINIA,	Gondar.	SIERRA LEONE,	Freetown.
GUINEA, SENEGAMBIA, SAHARA, SOUDAN.			

Islands.—MADAGASCAR, ST. HELE'NA, CANARY, MADEIRA.

Capes.—BON, GUARDAFUI, GOOD HOPE, VERD, BLANCO.

Mountains.—ATLAS, MOON, Kilimanjaro, SNOW, KONG.

Gulf, Channel.—GULF OF GUINEA, MOZAMBIQUE CHANNEL.

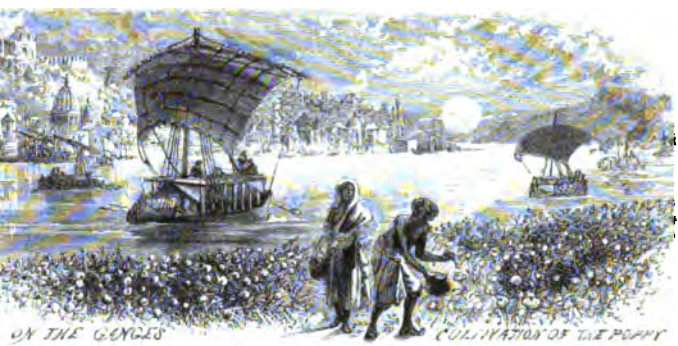
Lakes.—TCHAD, ALBERT, VICTORIA, TANGANYIKA, NYASA.

Rivers.—NILE, ZAMBESI, ORANGE, CONGO, NIGER.

Topics.—Let each pupil treat a topic in turn.

Size of Africa.—The Surface.—Productions.—The Palm.—The Ba'obab.—Wild Animals.—Condition of the People.—The Nile.—Other Rivers.—Morocco.—Algeria.—Tunis.—Tripoli.—Egypt.—Eastern Africa.—Cape Colony.—Diamond-mining.—Ostrich-raising.—Western Africa.—Sahara.—The Caravan Trade.—Soudan.—The Principal Cities of Africa.

A S I A .



LESSON LXXIV.

1. **Asia.**—We have visited four Grand Divisions; mention their names in order. Leaving Africa by the Isthmus of Suez, and crossing the Suez Canal, we now enter a fifth Grand Division—ASIA. You have a map of Asia on the next page.

2. **Size.**—Asia is the largest and most populous of the Grand Divisions. In size it exceeds North and South America together.

Applying the scale of miles just below parallel 40 North, find the greatest length of Asia from east to west. Applying the scale on meridian 100 East, find its greatest width from Northeast Cape to Singapore. What circle crosses northern Asia? What tropic crosses southern Asia? What part of Asia is coldest? What part is hottest?

3. **Zones, Climate, Productions.**—Asia lies in three zones. Refer to the map and name them.

In the far north it is icy cold. Here are dreary marshes, frozen three-fourths of the year. Here, also, are treeless plains, where nothing grows but moss, stunted grass, and dwarfish shrubs.

THE Ganges is the sacred river of the Hindoos. In old times, before they were taught better, mothers used to throw their infants into the Ganges, and the sick would cast themselves into its waves, deeming this the happiest of deaths. Poppies are raised in large tracts in the valley of this river. The opium made from their juice is largely exported to China, where the natives eat and smoke it, to the ruin of both mind and body.

In the circle we have a pass in the Himalayas, through which a merchant of Thibet is transporting goods on the back of the long-haired, sure-footed yak.

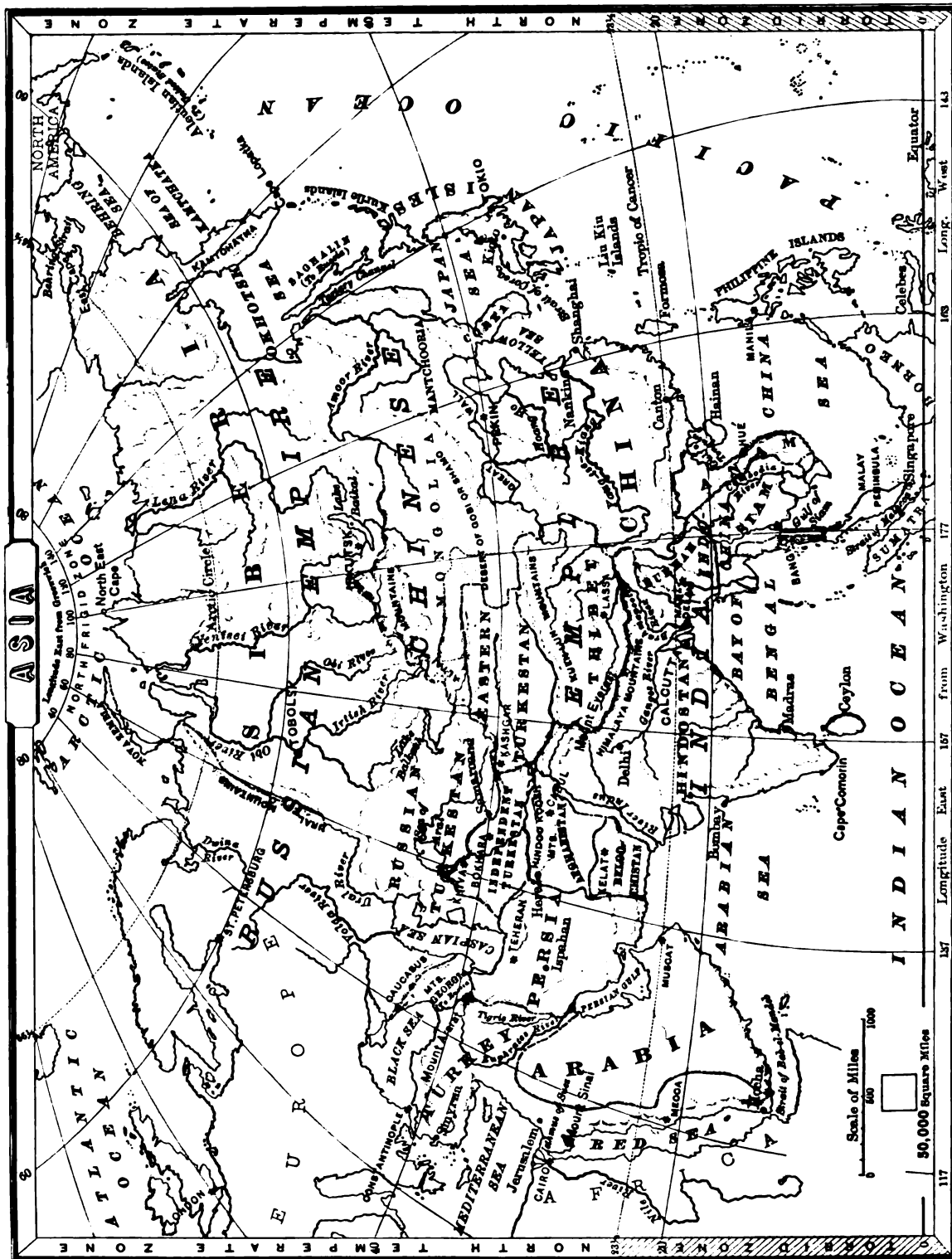
Below the circle is shown one of the rose-gardens of Persia, where the valuable attar of roses is made.

Farther south are forests and various fur-bearing animals. Next are regions abounding in grass, where large herds are pastured. Then come the grains and fruits of the temperate zones in their order, and finally those of tropical regions.

Near the Himalay'as on the north is an extensive plateau, very high and cold; but south of these mountains and others that spread out from them, the country is sheltered from cold winds, and the climate and productions are those of the Torrid Zone. Rice is the chief dependence of the millions who live in India and China.

4. Proper Names.—Learn to spell and pronounce,

Afghanistan, <i>ahf-gahn-is-tahn'</i>	Ispahan, <i>is-pā-hahn'</i>
Altai, <i>ahl-ti'</i>	Khiva, <i>ke'vā</i>
Aral, <i>ar'al</i>	Kuen Lun, <i>kuen loon</i>
Baikal, <i>bi'kahl</i>	Liu Kiu, <i>le-oo' ke-oo'</i>
Balkash, <i>bahl-kahsh'</i>	Obi, <i>o'be</i>
Beloochistan, <i>be-loo-chis-tahn'</i>	Saghalin, <i>sah-gah-leen'</i>
Bokhara, <i>bo-kah'rah</i>	Shanghai, <i>shang-hi'</i>
Cabul, <i>kā-bool'</i>	Teheran, <i>teh-h'rah'n'</i>
Delhi, <i>del'le</i>	Thibet, <i>tiō'-et</i>
Herat, <i>her-ah't'</i>	Turkestan, <i>toor-kes-tahn'</i>
Huē, <i>hoo-ay'</i>	Yang-tse-kiang, <i>yang' tse ke-</i>
Irkutsk, <i>ir-kootsk'</i>	Yenisei, <i>yen-e-say'e</i> [ang']



QUESTIONS ON THE OPPOSITE MAP.

LESSON LXXV.

What ocean lies north of Asia? What ocean east? What ocean south? What Grand Divisions west?

What six seas are on the eastern coast of Asia? Of what ocean are they arms?

What sea and bay are south of Asia?

What four seas are west of Asia?

What strait connects the Red Sea with the Indian Ocean? What does *Bab-el-Mandeb* mean? *Gate of Tears*; it is so called from the shipwrecks that occur there.

Bound Asia. What is the general slope of the country in the north?

What European country borders on Asia?

What mountains and river are on the western boundary of Asia?

What country is in northern Asia?

Of what empire does Siberia form part?

What three rivers of Siberia flow into the Arctic Ocean? Which is farthest east?

Name the most northerly cape of Asia. Name the most easterly cape.

What peninsula is in the eastern part of Siberia? Between what seas is Kamchatka?

What river and mountains lie on the boundary between Siberia and the Chinese Empire? Name two lakes in Asiatic Russia.

Where is Russian Turkestan? What sea is in Russian Turkestan?

Name two cities of Siberia.

What country is situated in eastern Asia, south of Siberia?

Name six divisions of the Chinese Empire. Which of these is a peninsula?

In what part of the Chinese Empire is Eastern Turkestan? In what part is Thibet?

In what division of the Chinese Empire is the Desert of Gobi (*go-be*) or Shamo (*shah-mo*)?

Name the two great rivers of China.

What is the capital of the Chinese Empire? Name three other cities of China.

How is Nankin situated? Shanghai? Canton? Name the capital of Eastern Turkestan.

What mountains are in Thibet? What is the capital of Thibet?

What three countries are south of China?

What name is applied to Anam, Siam, and Burmah, taken together?

What is the capital of Anam?

What river flows through Siam?

What peninsula is south of Siam?

What port is on the Malay Peninsula? On what strait? What is the capital of Siam?

What gulf and bay on the coasts of Siam?

What country of Indo-China is farthest west? What is the capital of Burmah?

In what direction is Shanghai from St. Petersburg? Peking from Constantinople?

LESSON LXXVI.

In what direction is India from Indo-China? What peninsula forms part of India? *H.*

What mountains are on the boundary between Hindostan and Thibet? What noted peak in the Himalayas?

Name two rivers that flow into the Bay of Bengal. Which has a number of mouths?

What other river is in Hindostan?

What is the capital of Hindostan? Name two other seaports of Hindostan.

Which of these is on an island?

How is Madras situated? Bombay? Delhi? What cape is at the southern extremity of Hindostan?

What large island is near it? What two countries are west of Hindostan?

What is the capital of Beloochistan? Name the capital of Afghanistan. What mountains are in the north of Afghanistan?

What country is north of Afghanistan? Name the two chief cities of Independent Turkestan.

What country is west of Afghanistan?

What is the capital of Persia? What other city is in Persia?

What body of water lies on the southwestern coast of Persia?

Northwest of Persia is what country? To what empire does Georgia belong?

What mountains separate Georgia from Europe? West of Persia is what country? What famous mountain is in Asiatic Turkey?

What two rivers in Turkey? What seaport? What city, celebrated of old?

To what country does a strip on the eastern coast of the Red Sea belong?

What city is on the Red Sea? What city is north of Mocha (*mo'ka*)? Point toward Mecca.

What mountain is near the head of the Red Sea? Near what isthmus is Mount Sinai?

In what country is Muscat? On what waters does Arabia border?

Where is Samarcand? Herat? Ispahan? How are the Japan Isles situated? What strait separates Japan from Core'a?

What is the capital of Japan? Which is farther north, To'kio or Peking?

What country of Asia is crossed by the Arctic Circle? In what zones is Siberia?

What countries are crossed by the Tropic of Cancer? What countries of Asia are in the North Temperate Zone? In the Torrid Zone?

On what waters would you sail in making a voyage from Nankin to Calcutta?

Into what water does East Cape project? What Grand Division lies east of Behring Strait and Behring Sea?

What country of North America is nearest to Asia? What islands are east of Kamtschatka?

To what country do the Aleutian (*ál-lé-á-lé*) Islands belong?

Mention three arms of the Indian Ocean.

DESCRIPTIVE MATTER.

LESSON LXXVII.

1. **Outline.**—If you look at the map of Asia, you will notice how many seas, gulfs, and bays, indent the coast. There are five large peninsulas, all pointing south. Name them.

2. **Surface.**—The highest plains and the highest mountains belong to Asia. All Central Asia consists of plateaus crossed by massive mountain-ranges. The plateau of Tibet is the most elevated inhabited land in the world. From it rise the Himalayas—the *abode of snow*, as their name signifies. To this range belongs Mount Everest, the loftiest summit known, nearly five and a half miles in height. There are no fire-mountains among the Himalayas, and few minerals of value.

The Altai Mountains are rich in minerals. North of them is a vast plain, sloping toward the Arctic Ocean.

3. **Deserts** cover a large part of Asia. The barren plains of Arabia are among the hottest regions in the world. On the sands of Gobi, an immense desert of the Chinese Empire, rain seldom if ever falls.

4. **Minerals.**—The Ural, as well as the Altai Mountains, are full of mineral treasures. Gold is distributed through both. Other products of the Ural range are diamonds, emeralds, iron, and platinum, a metal that was once coined as money by the Russians. Coal-fields occur in China, India, and Japan.

5. The Persian Gulf and Ceylon (*se'lon*) are noted for their pearls. Where do you think pearls are found? In oysters, which divers go down into the waters and gather from the rocks. The finest diamonds have been found in Hindostan. A very large one, which formed the eye of an idol in a Hindoo temple, was sold to a Russian empress for more than \$450,000.



ELEPHANT AT BAY IN THE JUNGLE—BENGAL TIGER.

6. **Wild animals** and poisonous serpents are numerous in Asia. Among them is one formidable beast found nowhere else—the tiger. The jungles of India (plains covered with reeds, tall grass, or thickets) are the tiger's favorite home. Here, while lying in wait for deer and other inhabitants of the jungle, he sometimes meets the elephant, whom he does not shrink from encountering. The lion, the camel, and the Indian rhinoceros, are among the larger animals of Asia.

7. **Asiatic Russia.**—We found that Russia covers more than half of Europe. Crossing the Ural Mountains and River, this great empire embraces also more than a third of Asia. But parts of its dominions are very cold and not worth much. The greater portion of Asiatic Russia is called Siberia.

8. Around the Sea of Aral lies Russian Turkistan. Here are extensive *steppes*—treeless plains covered with grass—where wandering people of the Tartar race find *pasturage* for their horses and camels, sheep and goats. Georgia, separated from Europe by the Caucasus Mountains, is also a part of the Russian Empire. Its men are noted for their fine forms, its women for their beauty.

9. **Siberia** is mostly cold and cheerless. Every year Russia banishes several thousand offenders to

its wilds ; sometimes even drunkards and vagrants are thus punished. Formerly these exiles endured severe hardships, but now they live more comfortably. Of late years the country has improved. Roads have been made and schools established. An active trade is carried on with China.

10. Siberia is important for its minerals and excellent furs. Mining has proved very profitable on the Ural slopes. Furnaces, iron-works, and factories, have been established near the mines. Towns have sprung up in their neighborhood, and handsome palaces have been erected there by the rich nobles that own the mining-lands.

11. The uncivilized natives living in the north and east are nearly as numerous as the Russians. They sell the Russian traders furs and walrus-tusks. Some of them have large herds of tame reindeer, which they drive from place to place for pasturage. Others kill great numbers of wild reindeer while swimming the rivers on their way to the south. Fish and the fowl that swarm in the northern waters help to support these natives.

Asia is the largest of the Grand Divisions, and contains the most inhabitants. The Yang-tse-kiang is its longest river. The Himalayas are its loftiest mountain-chain. Mount Everest is the highest peak in the world, and Thibet forms the most elevated plateau. More than one-third of Asia belongs to the Russian Empire.

WRITTEN EXERCISE.—*Complete the following* : From Europe we can enter Asia by crossing — ; from Africa, by crossing — ; from North America, by crossing —. If we sailed along the entire eastern coast of Asia, starting from East Cape, we should traverse in order the following waters : —. Coasting southern Asia, we should pass through —.



ON THE STEPPES—TARTAR CAMP.

LESSON LXXVIII.

1. **Turkey**, like Russia, has extensive dominions in Asia. Asiatic Turkey forms the larger part of the Ottoman Empire. It lies on the Black, the Mediterranean, and the Red Sea. CONSTANTINOPLE is the capital of the whole.

2. The chief seaport of Asiatic Turkey is SMYRNA, from which we get figs and opium. The most noted city is JERUSALEM. Here our Saviour was buried, and in the Middle Ages immense armies went from Europe, to capture the city and rescue his tomb from the Mohammedans.

The Turks cross their legs under them on mats or cushions ; they do not use chairs. They spend much time in the bath, and in smoking the long-tubed apparatus which serves them for a pipe. It is a rule of their religion that they wash their hands before and after every meal ; and they have need to do so, for they help themselves by dipping their fingers in the dishes. The women are treated as slaves rather than equals, being kept shut up in rooms by themselves. The men wear turbans, and the women are never seen in public without veils that hide their faces.

3. **Arabia** is a large peninsula in southwestern Asia, of which the Turks hold the coast on the Red Sea. It is divided among different states and tribes. Most of the Arabs have settled abodes, and cultivate the soil in a rude way, millet being their chief grain. But there are some that wander about through the interior, driving their flocks where they can find pasturage, and robbing caravans that journey through the deserts. The natives call the wastes in southeastern Arabia “the abode of emptiness”.

4. In connection with Arabia we must remember the fleet *Arabian* horses—*gum-arabic*, produced by its acacia-trees—and the excellent Mocha coffee. MECCA is a city of note. It was the birth-place of Mohammed ; his followers regard it as a holy city, and make pilgrimages thither in thousands every year.

5. **Persia**, Afghanistan, and Beloochistan, all Mohammedan countries, lie on a plateau bordered with mountains. The interior is barren, except where water is carried through it from streams. Much of Persia is a salt desert ; it seems strange that it should once have been the most powerful country in the world.

6. Carpets and shawls, drugs and the gems called turquoises (*tur-koiz'es*), are obtained from Persia. The mulberry-tree flourishes, and silk is a leading production. The *Shah*, or king, has power of life and death over his subjects.

7. **Afghanistan** commands the gates to India. The Afghans are a brave people, who look down on trade. They are under an *Ameer'*, or king, who lives at CABUL, the capital.

8. **Beloochistan** is divided among different tribes, principally wandering herdsmen. They are ruled by *Khans*, or chiefs, of whom the Khan of Kelat (*kel-ah't*'), the capital, is the head.

9. **India**.—Crossing the mountains on the east of Afghanistan (*see map*), we enter India. Here is Hindostan'—the land of the Hindoos—which reaches from the Indian Ocean to the Himalayas. This peninsula and the one east of it, with the islands near by, are often called the East Indies.

Smyrna is the chief seaport of western Asia. Jerusalem was the capital of the Jews, when they were a great nation. Mecca, in Arabia, is the holy city of the Mohammedans.

LESSON LXXIX.

1. **Hindostan**, Ceylon, and a strip on the east side of the Bay of Bengal (*ben-gawl'*), belong to the British Empire. The British began to trade here many years ago, and gradually gained control of nearly the whole country.

2. **The Hindoos** are brown-complexioned and slender. They are divided into four *castes*, or classes. The men and women of one caste are forbidden to marry those of another, or even eat with them. The highest caste includes priests, who are very learned and versed in ancient books on which their laws and religion are based. The common people are mostly Pagans; they do not believe in the true God, but worship idols. When a man dies, they think his soul passes

into some lower animal. Cows they hold sacred, and will not kill for food.

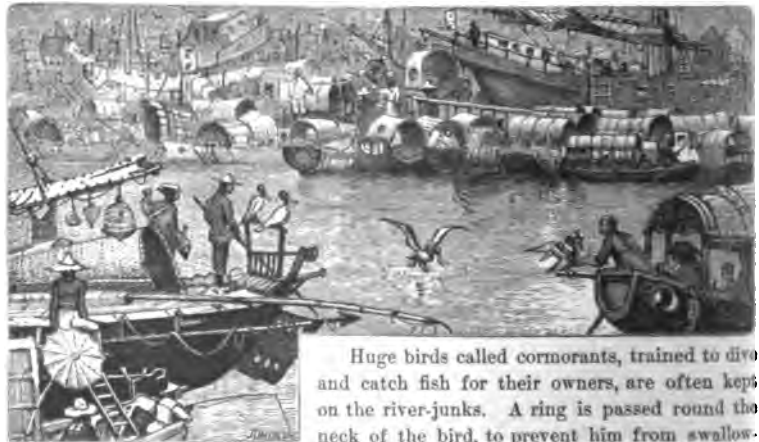
3. The Hindoos are very skillful in making fine muslins, and in weaving costly shawls from the hair of the Cashmere goat.

4. There are four times as many inhabitants in India as in the whole of North America. The land is very fertile, and produces rice abundantly—also, opium, indigo, gums, etc. The banyan, or Indian fig-tree, is a great curiosity. Its branches send out shoots to the earth, which take root, so that one tree sometimes has two or three thousand trunks and covers ten acres.

5. **Cities**.—CALCUTTA is the capital and metropolis of British India. BOMBAY and MADRAS, connected with Calcutta by railroad, are large seaports. Many English people reside in these cities.

6. **China**.—From India we pass into China. This country contains more people than all Europe, North and South America, together. They are so crowded that many live on boats in the rivers. Thousands of *junks*, as the Chinese boats are called, will sometimes be found moored together near a large city, where the fishing is good.

7. Where so many millions live, it is necessary to make the most of the land; so in China the soil is very carefully cultivated. Canals are dug, to carry water through the fields. Rice, tea, and silk, are the staples.



CHINESE BOAT-VILLAGE.

Huge birds called cormorants, trained to dive and catch fish for their owners, are often kept on the river-junks. A ring is passed round the neck of the bird, to prevent him from swallowing his prey.

8. The natives eat rice with *chopsticks*, which serve them instead of forks and spoons. Everybody drinks tea, and thousands are engaged in raising the shrub, gathering the leaves, rolling them up, drying them over fires, coloring and perfuming them. Silk and satin are used by the nobles for their robes. The poor content themselves with garments of cotton, which is raised to some extent. China-ware first came from China.

9. **The Chinese**, when they would dress in mourning, put on white. Yellow is worn only by high officials. The fashionable lady hobbles along on little deformed feet, which were prevented from growing by being kept tightly bandaged when she was an infant. Formerly this people would have no

dealings with the rest of the world. But now they trade with foreigners, and so many of them have come to America that you have probably seen a Chinaman, with his yellowish-brown face, oblique eyes, shaved head, and long pig-tail.

10. **Cities**.—Great crowded cities are numerous in China. PEKIN', which contains more people than New York, is the capital. SHANGHAI carries on the largest commerce with foreign nations.

11. **The Chinese Empire** contains other countries besides China Proper. The northern districts are adapted to pasturage, and large flocks are kept there. Corea has a king of its own, who pays tribute to the Emperor of China. Thibet is mostly barren. Fine goat's-hair shawls are made there.

The Chinese Empire embraces nearly one-fourth of Asia. Rice, tea, and silk, are its staples.

LESSON LXXX.

1. **Japan** is another wonderful empire of Asia, embracing several large, and many small, islands on the eastern coast.

The engraving represents a scene in one of the cities of this island-empire. The imperial mail-carrier is running through. Every one has to make way for him—the boy with his kite, the mounted merchant and his attendant, the passers-

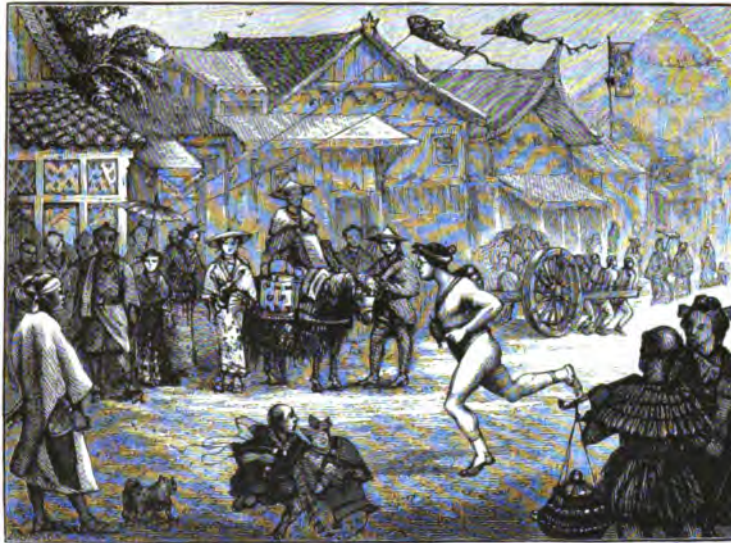
by of either sex. In the background is a clumsy loaded cart, drawn by men. The horses are small, and are kept for riding. In the foreground, on the right is a fisherman in his costume of straw; fish are much used for food, and are often eaten raw. On the left is an armed official. The ladies are dressed in gay embroidered silks.

2. **The Japanese** are intelligent and ingenious. Once, like the Chi-

nese, they shut themselves up from the world, and were behind the age. But lately they have opened ports to foreign trade, and introduced the improvements of other nations—steamboats, railroads, telegraphs, machinery, etc.

3. The Japanese are expert in farming and gardening. They have the curious art of dwarfing trees to the height of a few feet or even inches, and can trim their plants to the exact shape of any bird or beast. There are volcanoes on the islands, and earthquakes are numerous; the latter the natives think are caused by the struggles of a huge fish in the ocean beneath them.

4. **Exports**.—You have seen *japanned* ware; it is one of the exports of Japan. In making it, the juice of the valuable varnish-tree is used. Japanese vases, bronzes, and wood-carvings, are much admired. Many of the inhabitants are



JAPANESE STREET SCENE.

employed in producing silk and raising tea ; these articles are the chief exports.

5. **Cities.**—To'KIO, the capital, is larger than Brooklyn or Chicago. It is a manufacturing city, as is also KIRO (ke-o'to), the ancient capital.

6. **Indo-China**, the most easterly of the three southern peninsulas, embraces the kingdoms of Burmah, Siam, and Anam. Here we have the hot climate, tropical productions, thick jungles, and fierce beasts, of India. Most of the trade is carried on by Chinese residents. Siam is noted for its elephants ; there are several thousand in the royal army. White elephants, which are sometimes captured, are set apart for the king ; a white elephant is on the royal seal and flag.

7. **Bamboo.**—In Indo-China, as in China, the bamboo is one of the most useful plants. The young shoots are boiled as vegetables or made into sweetmeats ; the joints are put together for water-pipes ; the pith is used for lamp-wick, the wood for almost every purpose you can think of. Whole cities are made up of bamboo houses, the wood being merely lashed together, so that the pieces can be taken apart and put up elsewhere.

8. **Getting back.**—Look at the map of Asia, p. 86. What Grand Division just appears in the northeast corner ? When we left North America, we sailed *east* across the Atlantic. We traveled *east* across Europe, till we came to Asia. We kept on *east* across Asia ; and now, still keeping to the *east*, we cross Behring Strait, and get back to North America. We can, then, by keeping the same direction, go *round* the earth, and return to the place from which we started. What does this prove with respect to the shape of the earth (see p. 17) ? Illustrate with the globe.

Most of the Asiatics are Pagans or Mohammedans. China and India are the most populous countries of Asia ; together they contain nearly half the people in the world.

The largest city of Asia is Pekin, the capital of China.

The earth is round.

WRITTEN EXERCISE.—*Complete the following* : Three countries of Europe have large possessions in Asia ; viz., —, I—, C —, and J —, are the most important countries of Asia. Vessels from Europe bound for the East Indies used to go round the Cape of — ; now they can shorten the voyage by passing through the — Canal, which connects —. Our tea comes from — and —. These countries also produce a great deal of —. Their chief grain is —.

REVIEW OF ASIA.

LESSON LXXXI.

Learn in order the names of the following divisions of Asia. Bound each country. Describe the situation of each city and natural division.

Country.	Important Cities.	Country.	Important Cities.
ASIATIC RUS-	{ Tobolsk,	BELOOCHISTAN,	Kelat.
SIA,	{ Irkutsk.		{ Calcutta,
INDEPENDENT	{ Bokhara,	INDIA,	{ Bombay,
TURKESTAN,	{ Khiva.		{ Madras.
TURKEY,	{ Jerusalem,	CHINESE EMPIRE,	{ Pekin,
	{ Smyrna.		{ Shanghai.
ARABIA,	{ Mecca,	JAPAN,	Tokio, Kioto.
	{ Muscat.	BURMAH,	Mandelay.
PERSIA,	Teheran.	SIAM,	Bangkok.
AFGHANISTAN,	Cabul.	ANAM,	Hué.

Islands.—SAGHALIN, KURILE, LIU KIU, FORMOSA, CEYLON.

Capes.—NORTHEAST, EAST, LOPATKA, COMORIN.

Mountains.—ALTAI, HIMALAYA, EVEREST, ARARAT, SINAI.

Seas.—ARAL, CASPIAN, RED, ARABIAN, CHINA, YELLOW, JAPAN, OKHOTSK, KANTCHATKA, BEHRING.

Gulfs, Bays.—PERSIAN GULF, BAY OF BENGAL, GULF OF SIAM.

Straits.—BAB-EL-MANDEB, MALACCA, CORRA, BEHRING.

Lakes.—BAIKAL, BALKASH.

Rivers.—OBI, YENISEI, LENA, AMOOR, HOANG-HO, YANG-TSE-KIANG, CAMBODIA, BRAHMAPOOTRA, GANGES, INDUS, T'IGRIS, EUPHRA'TES.

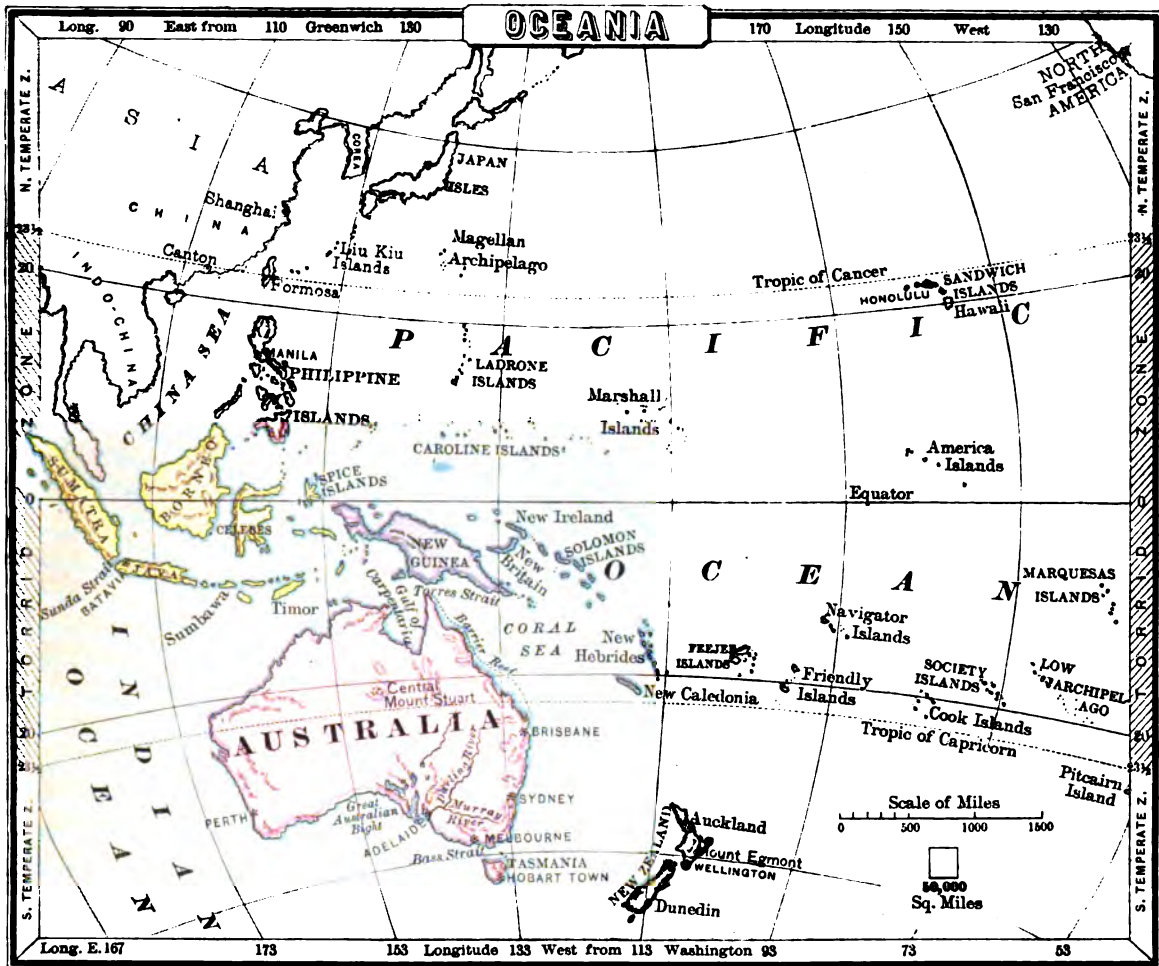
Topics.—Let each pupil treat a topic in turn.

Size of Asia.—Northern Asia.—Mountains of Asia.—Minerals.—Wild Animals.—The Steppes.—Siberia and its Inhabitants.—The Turks.—The Cities of Turkey.—Arabia.—Mecca.—Persia.—Afghanistan.—Beloochistan.—India.—The Ganges.—The Hindoos.—The Chinese Empire.—China and its People.—Japan.—The Japanese.—Indo-China.—Siam.—The Banyan-Tree.—The Bamboo.

OCEANIA.

LESSON LXXXII.

We have now traversed five Grand Divisions of the earth ; name them. A sixth still remains. It is made up of isles of the ocean, and is therefore called Oceania (o-she-ah'-ne-ă). See map on the opposite page.



MAP QUESTIONS.

What oceans and what sea surround the islands of Oceania? In what direction are these islands from Asia? Which is the largest of these islands? Point toward Australia. What ocean is west of Australia?

What sea is northeast of Australia?

What is the coral-reef northeast of Australia called?

Name the two chief rivers of Australia.

What mountain is near the center of Australia?

Name the capitals of five colonies embraced in Australia. Which of these is farthest south?

How is Sydney situated?

What gulf is on the northern coast of Australia?

What strait and island are south of Australia?

Name the capital of Tasmania.

In what direction is New Zealand from Australia?

Name the capital of New Zealand; its most northerly port; its principal mountain.

Going east from the Coral Sea, name in order six groups of islands that you reach.

In what zones does Australia lie?

In what zone is Tasmania? New Zealand? Sumatra (*sou-mah'trā*)? What island is southeast of Sumatra?

What is the capital of Java (*jah'vā*)?

What three large islands are crossed by the Equator?

Which of these islands is the largest?

Which is larger, New Guinea or New Zealand?

What water lies between Borneo and Indo-China?

What islands lie north of Celebes (*sel'e-biz*)?

What is the chief city of the Philippine Islands?

Name two groups east of the Philippine Islands.

What important group lies in the northeast of Oceania, near the Tropic of Cancer?

What is the capital of the Sandwich Islands?

If we sailed northeast from the Sandwich Islands, what Grand Division should we reach? What city?

In what zone are the Sandwich Islands? Point toward them. In what direction are they from Japan?



LESSON LXXXIII.

1. **Australia.**—The largest island of Oceania—so large that it is often called a continent—is Australia. It does not look very large on the map, because the map is on a small scale; but it is more than three-fourths the size of Europe or the United States.

Applying the scale to the map, find the greatest length of the island-continent from east to west. Find its greatest width from north to south. Copy the outline of Australia from the map. Locate the Murray and the Darling River, Central Mount Stuart, and the five capitals.

2. **Inhabitants.**—Australia is a part of the great British Empire, which we have found holding possessions in each of the Grand Divisions. At one time criminals were transported from England to Australia; but the country proved so good for sheep-raising that convicts were sent elsewhere, and English farmers and stock-raisers went out to settle there. Then rich gold deposits were discovered in the southeastern part; and soon large cities grew up, railroads and telegraphs were built, and the Australian colonies became important centers of commerce.

3. **The Australian Natives,** now few in number, are black, degraded, and repulsive. Their dress consists of skins fastened with skewers, and they live in shelters of bark or boughs. They devour raw flesh, lizards, and worms.

4. **Climate, Soil, etc.**—Australia is very hot; large rivers are few. Some parts of the interior are sandy deserts; others are covered with grass as high as a man on horseback.

5. Both the plants and the animals are peculiar. The kangaroo, which with its long tail and powerful hind-legs can take enormous leaps (*p.* 99), is hunted for its flesh and skin. The dingo, or wolfish wild dog, destroys great numbers of sheep. The black swan, and the emu with a long neck like the ostrich, are the most remarkable birds.

6. **Exports.**—Gold and wool are the chief exports of Australia. The engraving above shows miners at work, washing away the banks with water, and gathering the heavy particles of gold, which sink while the lighter earthy matter is carried off. The sketch on the right shows the process of sheep-shearing.—Other exports are coal, copper, wheat, tallow, and hides.

7. **MELBOURNE,** the capital of one of the colonies, is the largest city and busiest seaport.

8. **Coral Formations.**—Along the northeastern coast of Australia runs the Barrier Reef, over which for a thousand miles the waves break with the noise of thunder. This reef is of coral. What do you suppose made it? Myriads of tiny animals, which separate limy matter from the ocean, and build up great walls from deep ledges with their skeletons. Coral is of different forms and colors.

Many islands in the warmer seas, and particularly in the Indian Ocean and the Pacific, are coral formations. The animals can not live above the surface of the sea. But the top layers of their structure are ground to powder by the waves, and washed up toward the center. Next, sand and sea-weed are deposited. Birds bring seeds there, which spring up. Year after year the soil is increased and enriched by decaying leaves; and at last a fruitful island is formed for the residence of man.—Consult *Le Conte's "Elements of Geology,"* p. 138.

9. **The Island World.**—On the map of Oceania are many islands besides Australia. In general they have a warm climate, a fertile soil, and a rich vegetation. Their dark-brown natives are mostly uncivilized and worshipers of idols. Some of them are gentle and intelligent, while others are constantly engaged in war. Both men and women are skillful swimmers and divers, and will sport for hours in the surf.

European nations have taken possession of some of these islands, or parts of them. Many have sought them as permanent settlers, and others in order to trade in their rich products.

10. **The Bread-fruit** is the chief dependence of the natives. It is larger than a cocoanut, and when baked yields a nutritious pulp that is like bread made with eggs. The trees keep blossoming, and the fruit continues ripening, most of the year. One person can live on the produce of three trees.

Australia, the largest island or smallest continent in the world, belongs to the British Empire. Gold and wool are the staples. The Murray, its chief river, is a thousand miles long. Melbourne is its largest city.

LESSON LXXXIV.

Other Islands.—We must learn something about the other important islands of Oceania.

SUMATRA, most of which is subject to Holland, exports pepper, coffee, camphor, etc.

JAVA, larger than the state of New York, and governed by the Dutch, produces the best coffee.

BORNEO, as large as Great Britain and France together, is rich in spices and tropical forests.

THE SPICE ISLANDS, mostly under the Dutch, yield spices—cloves, nutmegs, pepper, etc.

THE PHILIPPINE ISLANDS belong to the Spanish, who named them after their king Philip II.

NEW GUINEA is occupied mainly by savage tribes. The Dutch have settlements on the coast.

NEW ZEALAND is a British colony. Like Australia, it yields gold and wool.

THE SANDWICH ISLANDS form a prosperous independent kingdom. The people have become civilized, and give great attention to their schools.

WRITTEN EXERCISE.—Complete the following:

There are — Grand Divisions of the earth; viz., —. Oceania consists of — lying mostly in the — Ocean. Several European countries have possessions in Oceania. Great Britain has —, —, and Tasma'nia. Holland has —, the — Islands, and part of —. Spain has —.

We reached Asia by traveling — from North America. Crossing the Pacific from Asia in an easterly direction, we get back to —. We thus find that the earth is —.

The Hemispheres.—We have found that the earth is round. A body round like a ball is called a *Sphere*. Half a sphere is called a *Hemisphere*.

Now suppose the earth cut into two hemispheres from north to south. The round surface of each may be represented as flat, and thus we get maps of the WESTERN and the EASTERN HEMISPHERE (see pages 96, 97). Taken together, they make a map of the World.



ISLANDERS OF THE PACIFIC.—BREAD-FRUIT TREE.

THE WESTERN HEMISPHERE.



Map Questions. — What two Grand Divisions lie wholly in the Western Hemisphere?

What continent do North and South America together form? Bound the Western Continent.

Name the two chief mountain-ranges of the Western Continent. Its three chief rivers. Its principal isthmus.

What ocean lies in the north of the Western Hemisphere? In the east? In the south? In the west?

Name the southernmost cape of the Western Continent. Name the easternmost cape.

What Grand Division projects from the Eastern into the Western Hemisphere?

What islands of Oceania are in the Western Hemisphere? Which of these is a British colony? Which group forms a civilized kingdom?

What two seas lie in the Western Hemisphere? What two bays? What three gulfs?

What part of the Western Hemisphere lies in the Torrid Zone? In the North Frigid Zone? In the South Frigid Zone?

THE EASTERN HEMISPHERE.



What two Grand Divisions lie wholly in the Eastern Hemisphere? What Grand Divisions lie partly in the Eastern and partly in the Western Hemisphere?

What continent do Europe, Asia, and Africa form? *The Eastern Continent.* Bound the Eastern Continent.

In what direction is Asia from Africa? Australia from Europe? Africa from North America?

Name six mountain-ranges of the Eastern Continent. Six of its great rivers. Its principal isthmus.

Which hemisphere contains the most land?

What ocean lies in the north of the Eastern Hemisphere? In the east? In the south? In the west?

What ocean lies wholly in the Eastern Hemisphere? What islands of Oceania lie in the Eastern Hemisphere?

What two islands of the Arctic Ocean lie in the Eastern Hemisphere?

In what part of the Eastern Hemisphere is the most land? What part of this hemisphere is in the Torrid Zone? In the South Frigid Zone?

LESSON LXXXV.

WRITTEN EXERCISE.—*Complete the following:* The two largest divisions of land in the world are called —. The Western Continent lies in the — Hemisphere; it is made up of — and —. The Eastern Continent lies in the — Hemisphere; it consists of —, —, and —. The sixth Grand Division, named —, does not belong to either continent. It is made up of — and other islands.

We live in the — Continent and the — Hemisphere. The map of the — Hemisphere shows the opposite side of the world from that on which we live. The Equator looks like a — line, but it is really a circle; half of it is in the — Hemisphere, and half in the —. It crosses three Grand Divisions; namely, —. The Arctic Circle crosses —, —, and —. The — Circle does not cross any of the Grand Divisions.

The Torrid Zone embraces the — part of North America, the — part of South America, the greater part of —, the — part of Asia, and the — part of Australia. The only difference between a continent and an island is that —.

There is nearly three times as much water as land on the earth's surface.

The five oceans—the Atlantic, Pacific, Indian, Arctic, and Antarctic—all connected together, are really but parts of one great body of water, which surrounds all the divisions of land, and which may be called "the Ocean".

THE EARTH AS A WHOLE.

LESSON LXXXVI.

We have visited the different parts of the earth; let us now look at the earth as a whole.

1. **Shape.**—*The earth is round* like a ball.

2. **Size.**—*The distance round this ball is about 25,000 miles.* If a railroad could be built round the earth, the fastest train would take thirty days and nights to make the circuit once.

3. **Motions.**—*The earth seems to stand still, but it moves.*

4. Pass a wire through a ball, and move the ball round on the wire from west to east. This is one way in which the earth moves.

5. The wire represents what is called the *Axis* of the earth. *The earth turns on its axis.*

The ends of the axis are the *Poles*. The north end is the North Pole; find it on the map of each hemisphere. The south end is the South Pole; find it on the map of each hemisphere.

6. Draw a large circle on the floor. Place a lighted lamp at the center. Move a ball along the circle, round the lamp. This is another way in which the earth moves. The lamp represents the sun. *The earth revolves round the sun.*

Illustrate the earth's motions with a globe.

7. **Latitude and Longitude** (refer to pp. 54, 63).—The Equator encircles the earth midway between the poles. Latitude is reckoned north and south from the Equator.

Some Meridian, reaching from pole to pole, is fixed upon, from which longitude is reckoned east and west. Sometimes two meridians are used, as in the maps in this book. The longitude from the meridian of Greenwich (*grin'ij*), a place near London, is given at the top of the maps; and the longitude from Washington, the capital of the United States, is given at the bottom.

8. **The Zones** (p. 54), differing from each other in heat, differ also in their vegetation, their animals, and the character of their inhabitants.

9. **Vegetation.**—The Frigid Zones have but a scanty vegetation during their brief summer, in many parts none at all. The Temperate Zones are best adapted to the grains. The Torrid Zone produces the most luxuriant herbage, the densest forests, the richest growths with the least labor to man.

Both climate and productions are affected by the elevation above sea-level. If we ascend a high mountain in the Torrid Zone, we shall find the vegetation become less and less tropical, till it resembles that of the Temperate, and finally that of the Frigid, Zones.

10. **Animals.**—The Frigid Zones have the largest tenants of the waters—whales, walruses, and seals. The domestic animals flourish best in the Temperate Zones. The largest and fiercest wild animals—the



BIRD-OF-PARADISE—LYRE-BIRD.



THE ZONES CONTRASTED.

lion, tiger, elephant, rhinoceros, etc.—are found in or near the tropical regions; also the most venomous serpents, and the birds of most beautiful plumage. Such are the bird-of-paradise, a native of the East Indian islands, and the lyre-bird of Australia, shown at the bottom of page 98. The engraving above represents the vegetable and the animal life of the different zones in contrast. Name the several zones in the picture. What animals are shown in each?

11. **The Inhabitants** of the Temperate Zones take the lead in industry, enterprise, and mental power. The nations of the white race are the most advanced in civilization.

12. Besides the *white* race just spoken of, which prevails in southwestern Asia, Europe, and America, there are four others. These are the negro or *black* race, of which Africa is the chief home; the *yellow* race of Asia (embracing also the Esquimaux), represented by the Chinese and Japanese; the *copper-colored* race, of which you may have seen specimens in our American Indians; and the *brown* race, scattered through many of the islands of Oceania.

THINGS WORTH REMEMBERING.

LESSON LXXXVII.

The largest Grand Division—**Asia**.

Area, 17,000,000 square miles.

The largest island—**Australia**.

Area, 3,000,000 square miles.

The highest mountain—**Mount Everest**.

About $5\frac{1}{2}$ miles high.

The longest range—the **Andes**.

4,500 miles long.

The largest ocean—the **Pacific**.

Area, 70,000,000 square miles—nearly $\frac{1}{2}$ the entire water-surface of the globe.

The largest lake—**Lake Superior**.

Area, 32,000 square miles.

The largest empire—the **Russian**.

8,400,000 square miles—about $\frac{1}{3}$ the entire land-surface.

The most populous empire—the **Chinese**.

434,500,000 souls—nearly $\frac{1}{3}$ the population of the globe.

The most densely populated country—**Belgium**.

482 inhabitants to a square mile.

The longest river—the **Missouri-Mississippi**.

Length from the source of the Missouri to the Gulf, 4,194 m.

The largest river—the **Amazon**.

The largest city—**London**, 3,621,000 inhabitants.

The leading country in the production of

Cotton,	UNITED STATES.	Tea,	CHINA.
Wool,	AUSTRALIA.	Coffee,	BRAZIL.
Silk,	CHINA.	Gold,	UNITED STATES.
Flax,	RUSSIA.	Silver,	UNITED STATES.
Wheat,	UNITED STATES.	Iron,	GREAT BRITAIN.
Corn,	UNITED STATES.	Coal,	GREAT BRITAIN.
Tobacco,	UNITED STATES.	Diamonds,	SOUTH AFRICA.

COMPARATIVE SIZE.—Texas is larger than the German Empire, Ireland, and Scotland, together.

California is larger than Central America.

Portugal and Maine are nearly equal in size; Cuba and Pennsylvania; England and North Carolina; Sicily and Maryland.

You have now been round the world. You have had a *description of the Earth's surface*. You have been studying **GEOGRAPHY**.

REVIEW OF THE WORLD.

Bound each country. Tell what you can about its surface, soil, climate, productions, exports, and inhabitants. Name the capital, and describe its situation. Describe the situation of each natural division.

WESTERN CONTINENT.

I. NORTH AMERICA.

1. Countries.

a. DANISH AMERICA.

Greenland ; Iceland. Describe each.

b. DOMINION OF CANADA.

Its seven provinces ? Its six principal cities ?

c. UNITED STATES.

New England States.

Middle Atlantic States.

Southern States.

Central States.

North Central States.

Rocky Mountain State.

Pacific States.

States of each group ?
Capital and largest
city of each state ?

Territories. Capitals ? Largest cities ?

District of Columbia.

d. MEXICO.

e. CENTRAL AMERICA.

Five republics ? British colony ? Capitals ?

2. Natural Divisions of Land.

ISLANDS.—N., B., W. I., V., Q. C.

CAPIES.—B., B., F., C., H., S., St. L., M.

MOUNTAINS.—A., R., S. M., S. N., Co., Cas., St. E.

3. Natural Divisions of Water.

BAYS AND GULFS.—B., H., St. L., F., M., H., C.

LAKES.—Gt. B., Gt. S., W., S., M., H., E., O.

RIVERS.—Y., M., St. L., M., M., R. G., C.

II. SOUTH AMERICA.

1. Countries.

Colombia,	Uruguay,	Bolivia,
Venezuela,	Argentine Rep.,	Peru,
Guiana,	Patagonia,	Ecuador.
Brazil,	Chili,	Paraguay.

2. Natural Divisions of Land.

ISLANDS.—T., J., F., T. d. F., C.

CAPIES.—G., St. R., H., B.

MOUNTAINS.—An., Ac., Ch., Co.

3. Natural Divisions of Water.

BAYS AND GULFS.—A. S., St. G., G., P.

LAKES.—M., T.

RIVERS.—Mag., O., A., Mad., P., P., R. d. I. P.

EASTERN CONTINENT.

I. EUROPE.

1. Countries.

Belgium,	Greece,
Norway,	Switzerland,
Sweden,	France,
Russia,	Roumania,
Austria,	Bulgaria,
German Empire,	Servia,
Denmark,	Montenegro,
Holland,	Turkey,
	Ireland.

2. Islands, Capes, Mountains.—Name them.

3. Seas, Bays, Gulfs, Straits, Lakes, Rivers.

II. AFRICA.

1. Countries.

Morocco,	Abyssinia,	Liberia,
Algeria,	Zanguebar,	Sierra Leone,
Tunis,	Mozambique,	Guinea,
Tripoli,	Natal,	Senegambia,
Egypt,	Cape Colony,	Soudan.

2. Islands, Capes, Mountains.—Name them.

3. Gulf, Channel, Lakes, Rivers.

III. ASIA.

1. Countries.

Asiatic Russia,	Afghanistan,	Anam,
Ind. Turkestan,	Beloochistan,	Chinese Emp.,
Turkey,	India,	Corea,
Arabia,	Burmah,	Thibet,
Persia,	Siam,	Japan.

2. Islands, Capes, Mountains.—Name them.

3. Seas, Bays, Gulfs, Straits, Lakes, Rivers.

OCEANIA.

1. Australia.

a. Bight (bay), Gulf. b. Rivers. c. Cities.

2. Islands and Island Groups.

a. Owned or settled by whom.

b. Productions.

OCEANS. How is each situated ?

- | | | |
|--------------|------------|---------------|
| 1. Atlantic. | 3. Indian. | 5. Antarctic. |
| 2. Pacific. | 4. Arctic. | |

MISCELLANEOUS REVIEW QUESTIONS.

1. Which is the larger of the two continents? What is the direction of the principal mountain-chains in the Eastern Continent? In the Western? In what direction is the Eastern Continent longest? The Western Continent? In what direction do most of the peninsulas of both continents extend?

2. Which Grand Division is the largest? The smallest? Which is the most indented by seas, bays, and gulfs? Which is the least indented? Which contains the longest mountain-range? The longest river?

3. What country has the bear for its emblem? The eagle? The lion? The white elephant? What countries have no sea-coast? What country contains the largest city in the world? Which is the largest country in North America? In South America? In Europe?

4. Which is the central state of the United States? Which state was the earliest settled by Europeans? Which was the earliest settled by the English? Which state has two capitals? Which has the most foreign commerce? Which produces the most iron? The most gold? The most cotton? The most corn?

5. Is an agricultural, a manufacturing, or a commercial country, most likely to be densely peopled? Why? Which is the most densely peopled country in the world? Which are the three most densely peopled states of the Union? What country contains the most inhabitants? Where do people live in boats on the rivers? Where do Indians live in "lake-villages" built on piles, over water?

6. Which is the largest island in the world? The largest in the Western Hemisphere? What islands are the seat of an empire? What islands are the great sugar-producing region? What island is noted for its pearls? For eider-down? What island is divided between two republics?

7. Name two isthmuses. What does each connect? Which is crossed by a canal? Through what waters would a vessel go from London to Calcutta by way of this canal? What cape does this canal save such a vessel the necessity of rounding? A ship sailing completely around the Mediterranean Sea would coast what countries?

8. What is the highest peak in the world? The highest peak of the Alps? The highest peak in North America? The highest peak in Africa? Name the loftiest mountains in South America. What is a volcano? Name a volcano in North America. Name two

in South America. Name two on islands. Name one in Italy.

9. Which is the largest ocean? Which ocean surrounds the South Pole? Which ocean is the seat of the greatest commerce? Which ocean washes the coasts of the East Indies? Which ocean has many arms on the west, but few on the east?

10. What are arms of the ocean called? Name the chief arms of the Pacific Ocean. Name all the sounds you can. What bay is noted for its oysters? What gulf is noted for its pearls? Name the largest lake in the world. The largest in South America.

11. Which is the longest river in the world? The longest in South America? In Europe? In Africa? Name four rivers that have falls. Point toward Niagara Falls. Imagine yourself at Niagara Falls, on the New York side; point toward Canada; toward Lake Erie; point down the river.

12. Explain why so many large cities are situated on rivers. If not on a river, on what is a large city likely to be situated? Name the largest city in the world. The largest in the Western Continent. The largest in South America. In Africa. In Australia. In Canada. In the West Indies.

13. Name the largest city in the United States, on the Mississippi River. The largest on the Ohio River. On the Great Lakes. In the territories. West of the Rocky Mountains. In New England.

14. What is the highest officer, or chief ruler, called in the United States? In Canada? In Russia? In Austria? In Nicaragua? In Roumania? In Tripoli? In Spain? In Brazil? In Turkey? In Chili? In Egypt? In Sweden? In Morocco? In Persia? In China? In Tunis? In Afghanistan? In France?

15. Name two republics in Europe. Name a republic in Africa. Name seven republics in North America. Name nine republics in South America. Name three empires in Europe. Name two empires in Asia. Name a kingdom in Oceania. Name an empire in South America.

16. What makes deserts? Which is the largest desert in the world? What deserts are in Asia? What desert is in Southern Africa? Which Grand Division has the least desert country? Which has the moister climate, Sitka or Morocco? Which is warmer, Baltimore or Montreal? How do you know? Which is colder, Italy or Norway?

QUESTIONS ON THE TEXT.

LESSON I., p. 19.—1. With what do we commence our study of the earth's surface? Why? Of what is the United States composed? What other name is often applied to it? 2. Of what does the United States form part? What is the full name of our country?

3. How can the whole of the United States be represented at once? 4. How long would it take to cross the United States from east to west in the cars? How long would it take to cross it from north to south?

LESSON II., p. 20.—1. What lie on the northern boundary of the United States? What are such bodies of water called? 2. What are these five lakes called? Why? 3. What lies on the east of the United States? What is such a body of salt water called? What is on the other side of the Atlantic? 4. What is meant by the Atlantic coast and the Atlantic states? 5. What lies on the west of the United States? Why was the Pacific Ocean so called? How does it compare in size with the Atlantic? 6. What name is given to the strip of land bordering the Pacific? To the states on the Pacific? 7. What lies south of the United States? What is such a body of water called? 8. Besides the thirty-eight states, what help to make up the United States? How do the territories differ from the states? 9. What district is included in the United States? What does the District of Columbia contain?

LESSON III., p. 21.—1. What do several mountain-ranges running in the same direction form? How many mountain-systems traverse the United States? In what direction? 2. Name the most easterly of these systems. How do its ranges run? What does it separate? What is such a ridge called? 3. How is the Atlantic Slope situated? 4. Mention the second of the mountain-systems. Into what countries do the Rocky Mountains extend? What do they traverse? 5. What is one of the most noted peaks of the Rocky Mountains? 6. What can be seen from the top of Pike's Peak? Between what streams do the Rocky Mountains form a watershed? 7. What are Cañons? Where are they common? 8. Describe the Grand Cañon of the Colorado.

LESSON IV., p. 24.—1. Which is the most westerly mountain-system of the United States? What state does the Sierra Nevada traverse? In what are these mountains continued? How do the peaks of the Sierra Nevada compare in height with those of the Rocky Mountains? 2. What is the meaning of the name *Sierra Nevada*? 3. Where is the Pacific Slope? 4. What is meant by the snow-line? What peak of the Sierra Nevada towers above the snow-line? 5. What does the word *plateau* mean? Describe the plateau from which the Rocky Mountains and the Sierra Nevada rise.

LESSON V., p. 24.—1. To what is the term *valley* applied? What valley lies between the Appalachian and the Rocky Mountains? Why is it so called? 2. In what does the Mississippi River rise? 3. Give an account of the deposits from the waters of the Mississippi. 4. What is the meaning of the word *Mississippi*?

5. Describe the Missouri River. 6. What does *commerce* imply (p. 14)? What natural features of the United States afford facilities for commerce? 7. What other advantages for commerce are there?

LESSON VI., p. 25.—1. In what does *agriculture* consist (p. 13)? What is one of the leading occupations in the United States? 2. What are the products of the northern part of the United States? 3. A little farther south is what region? South of the wheat region, what are the chief products? Throughout the corn region what are raised? 4. Describe the climate in the southern part of the United States, and mention the products. 5. What fruits are produced in different parts? 6. What is meant by *manufactures* (p. 13)? State what you can about manufactures in the United States. What is used in manufacturing? How is the machinery moved?

7. What minerals are found in the United States? What is the occupation of getting them out of the earth called? 8. What is the highest officer in the United States called? How is the President elected? Where does he live? Describe "the White House," as shown in the engraving. Who is President at the present time?

9. By what body are the laws made? Of what does Congress consist? By whom are the Senators chosen? The Representatives? Where does Congress meet? 10. How old is the United States? Tell what you know about its history.

LESSON XI., p. 28.—1. In what part of the United States is New England? What does this name imply? 2. Who gave New England its name? 3. By whom was New England first settled, and where? 4. On what was the landing made? With the aid of the engraving, describe Plymouth Rock and its surroundings as they were, and as they are.

5. Tell what you can about the early history of New England. 6. Give the dates of the Revolutionary War. How many colonies then established their independence? Name the thirteen original states. In what was Maine included? What were the settlers of Vermont called?

LESSON XII., p. 29.—1. Describe the climate of New England. 2. The surface. 3. The soil. 4. The productions. 5. To what is much attention given in Vermont? 6. For what else is Vermont noted? How is maple-sugar made? 7. What are found in the north of New England? What state, in particular, is famous for its timber? What city

is a great lumber-depot? 8. Describe the operations of the lumbermen. 9. What are leading occupations on the coast of New England?

LESSON XIII., p. 30.—1. Through what cities chiefly is the foreign commerce of New England carried on? What other commerce has it? 2. What lake and city are the seats of considerable commerce? Is this foreign or domestic commerce? 3. What is meant by exports and imports? What are the chief exports of New England? What are the imports? 4. What is the most important branch of industry in New England? Mention some of the principal manufactures. 5. Which are the great manufacturing states? What is a consequence of this? 6. Describe a cotton-factory. What do you see in the picture representing one? 7. What sites are sought for manufacturing purposes? What New England river furnishes such sites? For what is the Merrimac River remarkable? What manufacturing cities are on its banks? 8. Name some other manufacturing cities of New England. Which of these is famous for its prints? 9. Give the familiar name of each of the New England States.

LESSON XIV., p. 31.—1. What is the second group of states? Why are they called *Atlantic* States? Why are they called *Middle Atlantic* States? 2. By what routes can you go to the Middle Atlantic States from New England? 3. What is New York called? Why? What is the meaning of *Pennsylvania*? What is Virginia called, and why? From what state was West Virginia formed? For what is New Jersey noted?

LESSON XVIII., p. 34.—1. Which of the Middle Atlantic States are larger than the largest New England state? Why do they look smaller on the map? 2. Describe the climate of the Middle Atlantic States. 3. How is the Atlantic Plain situated? Describe the surface from the Atlantic Plain westward. 4. Where is fine scenery presented? 5. What great natural curiosity belongs to this group of states? Describe the Niagara River and Falls. 6. Give an account of the Adirondack Mountains. 7. In what are the people of these states largely engaged? Where does dairying receive attention? Where is lumbering carried on? In what other occupation are many engaged? 8. What are the agricultural products of the Middle Atlantic States? 9. To what are large tracts in Long Island and New Jersey devoted? What is New Jersey called? For what are Maryland and Delaware famous? What does Norfolk send to the New York markets?

LESSON XIX., p. 34.—1. 2. What minerals abound in the Middle Atlantic States? What is the extent of the coal-fields of Pennsylvania? Of West Virginia? How is iron obtained from the ore? What advantages has Pennsylvania for the production of iron? 3. What is another important mineral product of Pennsylvania and West Virginia? How is petroleum obtained? For what is it

used? 4. What state takes the lead in the production of salt? For what is Syracuse noted?

5. What cities of the Middle Atlantic States take the lead in manufactures? What establishments does Baltimore contain? 6. What city is noted for the manufacture of iron? Name two important manufacturing cities of New Jersey. Name two in New York, and tell what each manufactures. 7. What are the chief manufactures of Richmond? Of Wilmington, in Delaware? What manufacturing city is in West Virginia?

LESSON XX., p. 35.—1. What states are the chief seat of foreign commerce? What great commercial cities are in the Middle Atlantic States? What are brought to these cities, and how? 2. Which of these cities is the chief center of foreign commerce? How is New York situated? 3. What canals have helped to make New York a great commercial city, and how? 4. Name three other commercial cities of the Middle Atlantic States. Which of these is the largest? What are shipped from Norfolk? Whence do the oysters come?

LESSON XXIII., p. 38.—1. What is the third group of states? Which state of this group is the largest state of the Union? How does Texas compare in size with New England? 2. Which of the Southern States were among the original thirteen? 3. How was Florida obtained? What is the oldest town in the United States? 4. How were Louisiana, Arkansas, and the region north of them, obtained? To what did Texas once belong? What is it familiarly called, and why?

5. Describe the Southern States as regards surface. How is it necessary to protect the southern part of Louisiana? 6. What are found near the coast? Describe two of these large swamps. 7. What is meant by *bayous*? Which is the Bayou State? 8. What mountains are found in the Southern States? For what is Mount Mitchell notable? 9. Describe the climate of the Southern States.

LESSON XXIV., p. 38.—1. Mention the industries pursued in the Southern States. What are the farms called? 2. Mention some of the agricultural products. 3. What is a great staple of Louisiana? What products are obtained from sugar-cane, and how? 4. What is the most important production of the Southern States? Why is it important? What state produces the most cotton? 5. What fruits are raised in the South? For what is Florida famous? Describe a Florida orange-grove, as represented in the engraving. 6. What forest trees are worthy of mention?

LESSON XXV., p. 39.—1. What is a leading pursuit in Texas? What advantages for stock-raising does Texas possess? 2. Where does Texan beef find a market? 3. Mention some valuable pine products. 4. Where is the great turpentine district? Where is another turpentine region? 5. What city is the metropolis of the Southwest? Describe New Orleans. 6. Name four other cotton-ports. 7. In

what are many river-ports largely engaged? Name two of these river-ports. What Southern capital is a busy railroad center?

LESSON XXVI., p. 41.—What three states are called Central States, and why? What group lies north of the Central States? How far north do the North Central States extend? Which is the most easterly of the North Central States? The most westerly? What animals are shown in the left-hand picture on p. 42? What do beavers often build in streams? Describe the scene represented in the middle picture. What birds do you see in the right-hand picture?

LESSON XXX., p. 42.—1. Describe the region embraced in the Central and the North Central States, as it was a hundred years ago. 2. Who owned these lands? What were the Indians obliged to do? What have they left behind them? Give examples of Indian names. 3. Give an account of the growth of this section of the country.

4. Which is the Lake State? What other states might be so called? Why? 5, 6. To what point on the Great Lakes is there water communication from the Atlantic? Where are canals constructed, and why? 7. What are prairies? What kind of a soil has prairie-land usually? 8. Which of these states consist mainly of prairies? In what parts are mountains? In what parts, forests?

LESSON XXXI., p. 43.—1. What wonderful cave is in Kentucky? Describe Mammoth Cave. 2. In what minerals does Missouri abound? What two valuable mountains are in Missouri? Where are coal-fields situated? What mineral is abundant in Wisconsin? 3. What minerals are a source of wealth to Michigan? In what part of the state are they? What is remarkable about the Michigan copper-mines? At what place in Michigan is salt made?

4. Where is a great lead region? 5. What do the Black Hills contain? 6. In the production of what does Kentucky take the lead? Iowa? For what is hemp used? Describe the leaves of hemp, as shown in the picture. What is manufactured from flax? What other products are obtained from it? Mention what you can about the use of tobacco.

7. For what grain are the North Central States particularly noted? What is said of the quantity of wheat raised? How is it transported? 8. What other grain is a staple product of these states? 9. Mention some other products of these states. 10. What is a leading industry throughout this section? What are largely exported?

LESSON XXXII., p. 44.—1. How do the Central and the North Central States rank as regards manufactures? 2. What places are noted for the manufacture of flour? 3. Where is lumber made in large quantities? 4. What other manufacturing establishments are there? 5. In what does pork-packing consist? What cities are noted for this business?

6. What is one of the most important pursuits of this section? What three great commercial cities belong to this section? 7. Name the two largest cities west of the Alleghanies. How many inhabitants has each? Describe St. Louis. 8. State what you know about Chicago. 9. Describe Cincinnati. What do you see in the picture of this city on p. 44? What river is in the foreground? 10. In whose honor was Louisville named? For what is this city an important market? 11. Name some of the principal lake-ports, and tell something about each. 12. What have helped to build up large cities in this section? Name some of the prominent railroad centers. With what is Omaha connected by railroad?

LESSON XXXIII., p. 45.—The railroad extending west from Omaha follows what river? What states and territories does it traverse? What city is at its western end? Through what section of the Union does it pass? What are these states and territories called? What does the engraving on p. 45 represent? Describe the fort. The palisades. Why is the post built on a river? What do you see in the foreground? How does the Indian woman carry her infant?

LESSON XXXVII., p. 48.—1. From what tract were some of these states and territories made? From what were California and Nevada laid off? What words, occurring in their names, show the Spanish origin of many places in California? 2. What people still rove over parts of these territories? 3. What does Government maintain throughout this section?

4. Why is *Indian Territory* so called? In what condition are many of the Indians there? 5. What animals are found in the far West? To which of the four divisions of animals do they all belong (*see p. 10*)? 6. Give an idea of the size of these states and territories, as compared with the New England States. 7. Describe this part of the country as regards elevation.

8. Where does but little rain fall? Why? To what do the farmers resort, in order to raise crops? Describe the valleys of California and Oregon, and the climate of the Pacific Slope. 9. Name the largest lake in this section. Describe Great Salt Lake.

LESSON XXXVIII., p. 49.—1. Where is the National Park? How large is it? For what is it remarkable? 2. Describe the parks of Colorado. 3. What natural curiosities are found in California? Describe the Yosemite Valley. 4. What are the leading occupations in this section? 5. What is generally the case with regard to manufactures in newly-settled regions? What exception is there in this section?

6. State what you can about the commerce of the Pacific coast and of San Francisco. 7. What are the staples of Oregon? What are produced in California? 8. What metals are found in many parts of this section? What three states rank foremost in the production of the precious metals? What territories are rich in silver-ores?

9. Give an account of the discovery of gold in California. Where was gold afterward found? What mining towns have had a rapid growth? 10. What is quicksilver? Where are rich mines of this metal? What minerals are in Wyoming? 11. What is the metropolis of the Pacific coast? Of Oregon? Of Colorado? What is the finest building west of the Rocky Mountains? Describe it, as shown on p. 49. What are represented on the left of it? For what is Santa Fé noted?

LESSON XLII., p. 52.—1. What territory is detached from the rest of the United States? 2. What kind of a government is the United States? What is a *republic*? 3. If we go north from the United States, what do we enter? Northeast of the Dominion of Canada lies what division? Why is it called *Danish* America? Going south from the United States, what country do we enter? What country is southeast of Mexico? What Grand Division do these countries form?

LESSON XLIV., p. 54.—1. Are the lines that cross the maps really on the earth's surface? What are the lines that run up and down called? Where do the numbers that denote the meridians stand? What are the lines that extend from right to left called? Where do the numbers that denote the parallels stand? 2. What is the use of these lines? Give an example. 4. What are Zones? 5. What does *torrid* mean? What part of North America is in the Torrid Zone? To what line on the north does the Torrid Zone extend? 6. What zone lies north of the Tropic of Cancer? What does *temperate* mean? To what line on the north does the North Temperate Zone extend? 7. What zone lies north of the Arctic Circle? What does *frigid* mean? Describe the North Frigid Zone.

LESSON XLV., p. 54.—1. After whom are many places in the northern regions named? After whom is Behring Sea named? Hudson Bay? 2. How large is Alaska? How far can the Yukon River be ascended? Which is the highest mountain in North America? 3. For what is Alaska valuable? 4. Describe the walrus and the mode of hunting it. What do you see in the picture on p. 54? 5. Name the chief town of Alaska. What is peculiar about the climate of Sitka? 6. Describe the Arctic coast of Canada. What attempt has frequently been made, and with what success? 7. What people inhabit these northern shores? Describe the Esquimaux. Describe the outside of their huts, as shown in the picture; the inside. 8. Describe Greenland. 9. Tell what you have learned about whales. 10. Describe Iceland. 11. Give an account of the volcanoes and geysers of Iceland. 12. On what chiefly do the Icelanders depend? What do they export? What is eider-down?

LESSON XLVI., p. 56.—1. Describe the different parts of the Dominion of Canada. 2. What is this part of America sometimes called? Why? 3. How does the Dominion

of Canada compare in size with the United States? What does it contain? Which are the two most westerly provinces? 4. Name the five southeastern provinces. Between what are they situated? 5. Describe the government of Canada. What is the capital of Canada?

LESSON XLVIII., p. 58.—1. Give an account of the surface, soil, and productions, of the southeastern Canadian provinces. To what is British Columbia adapted? 2. Describe the climate of Canada. 3. Of what descent are the inhabitants? 4. Give an account of the Canadian Indians. 5. What minerals are found in Canada? 6. What is one of the principal occupations? Describe a raft. 7. Give an account of the fisheries. 8. Mention another valuable product of Canada. How are the furs obtained? Name some of the fur-bearing animals, and describe them as shown in the picture. Describe the trapper and his mode of life. State what you know about the Hudson Bay Company and its posts.

LESSON XLIX., p. 59.—1. For what is Ottawa noted? 2. Montreal? 3. Describe Quebec. What memorable battle was fought near Quebec? 4. Name the third city of the Dominion. 5. What city is the metropolis of Nova Scotia? Of New Brunswick? 6. What British colony is in North America? What is included in the same government as Newfoundland? 7. What constitute the wealth of Newfoundland and Labrador? What story did Cabot tell about the fish on the Banks of Newfoundland?

LESSON L., p. 59.—1. In what direction do we next go? 2. What river do we cross? What country do we enter? Mention some of the strange things we see in Mexico. What is a *ranch*? A *corral*? 3. Give an idea of the size of Mexico. Describe its surface; its line of volcanoes; its coasts.

4. What are the principal productions of Mexico? 5. What is cochineal? 6. What is pulque, and how is it made? 7. State what you know about the minerals of Mexico. 8. What is the government of Mexico? 9. Describe the capital. What is the chief seaport? Give an account of the conquest of Mexico by the Spaniards.

LESSON LI., p. 61.—1. What country lies southeast of Mexico? 2. By whom was Central America settled? 4. Of what does Central America consist? Describe the surface. 5. From what does Central America suffer? Give instances. 6. Where is mahogany obtained? What are the chief products of Central America? 7. What important group of islands is near the southeastern coast of North America? 8. Which two of the West India Islands belong to Spain? Which is a British colony? How is Hayti divided? Mention the chief productions of the West Indies. What is represented in the engraving? What objects do you see in the picture?

LESSON LIII., p. 63.—1. Why is the name *Central America* appropriate? What Grand Division is south of it?

How are North and South America connected? 3. What is it proposed to do in connection with the Isthmus of Panama? Why? 4. What do North and South America together form? What is the difference between a continent and an island? 5. In what zone is Central America? To what on the south does the Torrid Zone extend? 6. How is the line called the *Equator* situated? By what lines is the Torrid Zone bounded? 7. How does the temperature change as we leave the Equator? What zone is south of the Tropic of Capricorn? How do the seasons of the South Temperate Zone compare with ours? What zone is south of the South Temperate? What are found there? 8. What nations first settled South America?

LESSON LVI., p. 66.—1. Describe the surface of South America. 2. What are the chief mountains of South America? State all you have learned about the Andes. 3. Give an account of the volcanoes of the Andes. Of Chimborazo and Cotopaxi. 4. What visitations are frequent? 5. Describe the slopes of the Andes. What does the engraving show? Mention what you can about the llama. 6. Where are rainless regions found? Why are they rainless? 7. Where are the important rivers of South America? Name the three principal ones. Give an account of the Amazon. Why was the Orinoco so called? The Rio de la Plata? 8. What are traversed by each of these three rivers? 9. Describe the grassy plains of the Orinoco. 10. Describe the forest plains of the Amazon, and the animals that inhabit them. 11. Describe the pampas. What use is made of the cattle that live on the pampas?

LESSON LVII., p. 67.—1. What trees are found in the forests of South America? How is India-rubber obtained? What do you see in the picture? 2. Mention the cultivated products of South America. For what is Chili noted? Paraguay? 3. What is the most valuable mining product? Give an account of the mines near Potosi. 4. What other minerals are found, and where? 5. What people form part of the population? What is the Indian in the engraving doing? From whom mainly have the white inhabitants sprung? 6. What are the chief pursuits? What are imported? State the exports of the several countries. For what is Brazil noted? 7. What is the form of government in most of the South American countries? What is the government of Brazil? Of what does Guiana consist? By what countries is Patagonia claimed? 8. Which is the largest city of South America? Name the cities next in size. To what does Panama owe its importance? What does the left-hand picture in the engraving represent? Describe the different objects you see there. What does the picture on the right represent? Describe the houses shown there.

LESSON LIX., p. 69.—1. How do we go to the Old World from the New? What Grand Division do we first reach? 2. Compare Europe with North America in size; in pop-

ulation. How does it compare in size with the United States? In what zones is Europe?

LESSON LXII., p. 72.—1. Describe the surface of Europe. What parts are lower than the ocean? 2. What mountains contain the loftiest peak in Europe? What are the highest mountains wholly in Europe? Describe the scenery of the Alps. 3. What is the highest peak of the Alps? What have been built through the passes? What are avalanches? Of what are the Alps the home? 5. What famous volcanoes are in Europe? What eruption of Vesuvius is memorable? 6. For what is the coast of Europe remarkable? What is due to the number of good harbors? 7. Name three of the principal rivers of Europe. For what is each noted? Describe the scene represented in the engraving. Why are rocks placed on the roof of the cabin?

LESSON LXIII., p. 73.—1. Describe the climate in different parts of Europe. 2. What are the productions of different sections? 3. Where is cotton produced in limited quantities? From what is sugar made? Why is the mulberry important? Where does it flourish? In what parts of Europe are dense forests? 5. State what you can about Norway. About Sweden. 6. How much of Europe does Russia embrace? What are among the staples of middle Russia? In what part is wheat produced? 7. What are exported from Russia? 8. What wild animals are in Russia? 9. What are a feature of the commerce of Russia? 10. What is the government of Russia? What is the emperor called? What is the capital? The next city in importance?

LESSON LXIV., p. 74.—1. Mention the countries of Central Europe. 2. What is an empire generally? With what empire is this the case? Name one of the large divisions of Austria. What are produced in Hungary? Describe the Hungarian peasants shown in the picture. 3. What manufactures are largely carried on in Austria? What is the capital? 4, 5. Of what is the German Empire made up? State all you can about the German Empire. 6. What is the capital? The chief seaport? 7. To what are Denmark, Holland, and Belgium, adapted? What pursuits are largely carried on by the Danes and the Dutch? Describe the Dutch and their country. Give an account of the storks in Holland. 8. Tell what you can about Belgium. 9. What is Switzerland called? For what are its people noted? 10. What are common employments among the Swiss? What manufactures are specially noted? 11. What does France produce? What are leading industries? 12. What are among the chief manufactures? 13. What valuable minerals has France? 14. Describe Paris. What is the second city of France, and for what is it noted? What city is the chief seat of foreign commerce?

LESSON LXV., p. 75.—1. Name the countries of Southern Europe. 2. Give a general description of this region. How are grapes gathered (*see engraving*)? How are raisins dried? 3. Tell what you know about the principalities. 4. What is Turkey called? What is the ruler styled? What is the condition of the people? 5. What advantages does Turkey possess? Why are they not turned to account? 6. What manufactures of Turkey are the best known? What is the capital? 7. Give an account of the Turks and their religion. 8. What was once the condition of Greece? What is the chief export of Greece? 9. Give an account of Italy and its productions. 10. What ancient nation lived in Italy? What is the capital of Italy? Describe it. Name the three cities next in importance. For what is each remarkable? 11. Describe the surface of Spain and Portugal. For what is each celebrated? What species of oak is found in this peninsula? 12. For what were these countries formerly noted? What once befell Lisbon?

LESSON LXVI., p. 77.—1. Of what do the British Isles consist? What countries are embraced in the island of Great Britain? 2. What do the four countries in the British Isles constitute? How does this power rank? What is it sometimes called? 3. With what does England teem? What is the capital? Describe London. What is the second commercial city of the kingdom? Name some other cities, and the manufactures for which they are famous. 4. Whence does England draw supplies of grain? 5. What can you say of Scotland and its cities? 6. What kind of a country is Wales? 7. Describe Ireland and its chief city. What is made at Belfast? 8. What groups of islands are off the coast of Scotland? What are the leading employments of the people? How do they get the eggs and feathers of sea-fowl?

LESSON LXVIII., p. 79.—1. Name the fourth Grand Division. How do we reach it? 2. How does Africa compare in size with the other Grand Divisions?

LESSON LXXI., p. 82.—1. Under what disadvantages does Africa labor? What is the consequence? 2. Describe the negro inhabitants of the interior. 3. As regards elevation, what is Africa for the most part? Name the highest range in Africa; the highest peak. 4. Which is the longest river in Africa? What is peculiar about the Nile? 5. Mention four other large rivers of Africa. 6. What kind of wild animals inhabit Africa? Mention some of them. 7. What are produced in the north of Africa? In the south? On what do the negro tribes live? 8. Describe the palms. What do they yield? What tree produces gum-arabic? Describe the baobab. 9. What is Sahara? What is its extent? What is its only valuable product? Describe a sand-storm.

LESSON LXXII., p. 83.—1. Name the Barbary States. Why are they so called? What is the religion of many of the

inhabitants? What are made and exported? 2. What is the ruler of Morocco called? Where does he live? What is *morocco*, and why is it so called? For what animals besides the goat is Morocco noted? 3. To what country does Algeria belong? Describe the capital. 4. What are the rulers of Tunis and Tripoli called? By whom is the Bey of Tripoli appointed? What countries pay tribute to Tripoli? 5. What was formerly the condition of Egypt? What does it still contain? 6. On what country is Egypt dependent? What is the title of the ruler? How far south does the Khedive rule? 7. What has recently added to the commercial importance of Egypt? 8. What is the capital of Egypt? Describe Cairo. 9. Give an account of the countries of Eastern Africa. 10. What is the leading power in Southern Africa? What countries in Southern Africa belong to Great Britain? To whom does Caffraria belong? Zulu-Land? The Orange River Free State? 11. What is the chief product of Cape Colony? What at one time made Cape Town important? Where have diamonds been found? 12. To whom does most of Western Africa belong? What nations have settlements on the coast? What is Sierra Leone? Liberia? What do you see in the engraving? 13. Describe the tribes of Soudan. The tribes of Southern Africa. What does the engraving on p. 83 represent? Tell what you can about the ostrich.

LESSON LXXIV., p. 85.—1. What is the fifth Grand Division? How can we reach Asia from Africa? 2. In what does Asia surpass the other Grand Divisions? How does it compare with North and South America? 3. In what three zones is Asia? Describe the northern part. What follow in order toward the south? Describe the country near the Himalayas on the north; on the south. What grain is the chief dependence of the Indians and Chinese? What do you see in the picture on the right of the engraving? What is shown in the circle? What is represented in the picture below the circle?

LESSON LXXVII., p. 88.—1. What is remarkable about the coast-line of Asia? 2. Of what does Central Asia consist? What is remarkable about the plateau of Thibet? What mountains rise from it? Name their loftiest peak. What is north of the Altai Mountains? 3. What parts of Asia are deserts? 4. What mountains are rich in minerals? Mention the mineral products of the Ural range. Where do coal-fields occur? 5. For what are the Persian Gulf and Ceylon noted? How are pearls obtained? What have been found in Hindostan? 6. Give an account of the wild animals of Asia. 7. How much of Asia belongs to the Russian Empire? What is the greater part of Asiatic Russia called? 8. How is Russian Turkestan situated? What are found in Russian Turkestan? For what is Georgia noted? 9. What kind of a country is Siberia? What use does Russia make of it? 10. For what is Siberia important? 11. Give an account of its uncivilized natives.

LESSON LXXVIII., p. 89.—1. What country besides Russia has extensive dominions in Asia? On what seas does Asiatic Turkey lie? 2. What is the chief seaport of Asiatic Turkey? Its most noted city? Give some account of the habits of the Turks. 3. Tell what you know about Arabia and the Arabs. 4. What must be remembered in connection with Arabia? What makes Mecca notable?

5. Of what do Persia, Afghanistan, and Beloochistan, consist? What religion prevails there? With respect to Persia, what seems strange? Why? 6. What are obtained from Persia? What is the chief ruler called? 7. What kind of a people are the Afghans? What is their chief ruler called? 8. Among whom is Beloochistan divided? What are their chiefs called? 9. How do we enter India from Afghanistan? What country forms part of India? What are included in the East Indies?

LESSON LXXIX., p. 90.—1. What parts of India belong to the British Empire? 2. Describe the Hindoos. 3. In what are the Hindoos skillful? 4. How does the population of India compare with that of North America? Mention some of the productions of India. What is a great curiosity? 5. Which are the three principal cities of British India? 6. What is remarkable about the population of China? What is represented in the engraving? Describe the different objects you see in it.

7. How is the land cultivated and watered? What are the three staples of China? 8. How do the natives eat rice? In what occupations are thousands engaged? What fabrics do the people of China use for garments? 9. Mention some of the habits of the Chinese. 10. Name two cities of China. 11. State what you can about other parts of the Chinese Empire.

LESSON LXXX., p. 91.—1. What are embraced in the empire of Japan? What is shown in the engraving? Describe the different objects that you see in it, and tell what they represent. 2. Describe the Japanese. 3. In what are the Japanese expert? What is their notion about earthquakes? 4. Mention some of the manufactures and exports of Japan. 5. What is the present capital of Japan? What was the ancient capital?

6. How is Indo-China situated? What kingdoms does it embrace? Describe the country. For what is Siam noted? 7. What useful plant flourishes in China and Indo-China? To what uses is the bamboo applied? 8. What is the shape of the earth? How is this proved by our travels?

LESSON LXXXII., p. 92.—What is the sixth Grand Division? Why is Oceania so called? In what ocean are most of its islands?

LESSON LXXXIII., p. 94.—1. What is the largest island of Oceania? How large is Australia, compared with Europe and the United States? Why does it not look larger on the map? 2. To what empire does Australia belong? To what use was it first put? What changes afterward

took place? 3. Describe the Australian natives. 4. Give an account of the climate and soil of Australia. 5. Its animals.

6. What are the chief exports of Australia? Explain the operations of the gold-miners, as shown in the engraving. Describe the process of sheep-shearing. 7. What is the largest city of Australia? 8. Describe the Barrier Reef. How is coral made? How are coral islands formed? 9. Describe the other islands of Australia, and their inhabitants. 10. On what chiefly do the natives depend for subsistence?

LESSON LXXXIV., p. 95.—State what facts you can about Sumatra. Java. Borneo. The Spice Islands. The Philippine Islands. New Guinea. New Zealand. The Sandwich Islands. What is the shape of the earth? What is a round body like a ball called? What is half a sphere called? What do the maps of the Western and the Eastern Hemisphere represent? Taken together, what do they make?

LESSON LXXXVI., p. 98.—1. What is the shape of the earth? 2. What is the size of the earth? 3. Does the earth stand still or move? 4. Illustrate one way in which the earth moves. 5. On what does the earth turn? What are the ends of the axis called? How are the poles distinguished? 6. Illustrate the second motion of the earth. Round what does the earth revolve? 7. From what is latitude reckoned? How is the Equator situated? From what is longitude reckoned? What two meridians are used to reckon from, in the maps in this book?

8. In what respects do the zones differ? 9. Compare the different zones as regards vegetation. By what are both climate and productions affected? 10. Compare the zones as regards their animals. 11. As regards their inhabitants. What race is the most advanced in civilization? 12. Where does the white race prevail? How many other races are there? Name them, and tell the home of each.

LESSON LXXXVII., p. 99.—What is the largest Grand Division? Its area? The largest island? Its area? The highest mountain? Its height? The longest mountain-range? Its length? The largest ocean? Its area? The largest lake? Its area? The largest empire? Its area? The most populous empire? Its population? The most densely populated country? How many inhabitants to a square mile? The longest river? Its length? The largest river? The largest city? Its population?

What country takes the lead in the production of cotton? Wool? Silk? Flax? Wheat? Corn? Tobacco? Tea? Coffee? Gold? Silver? Iron? Coal? Diamonds? Give an idea of the size of Texas, by comparing it with three European countries taken together. Compare California and Central America. What state is of about the same size as Portugal? As Cuba? As England? As Sicily?—Of what have you now finished the description? What have you been studying?



